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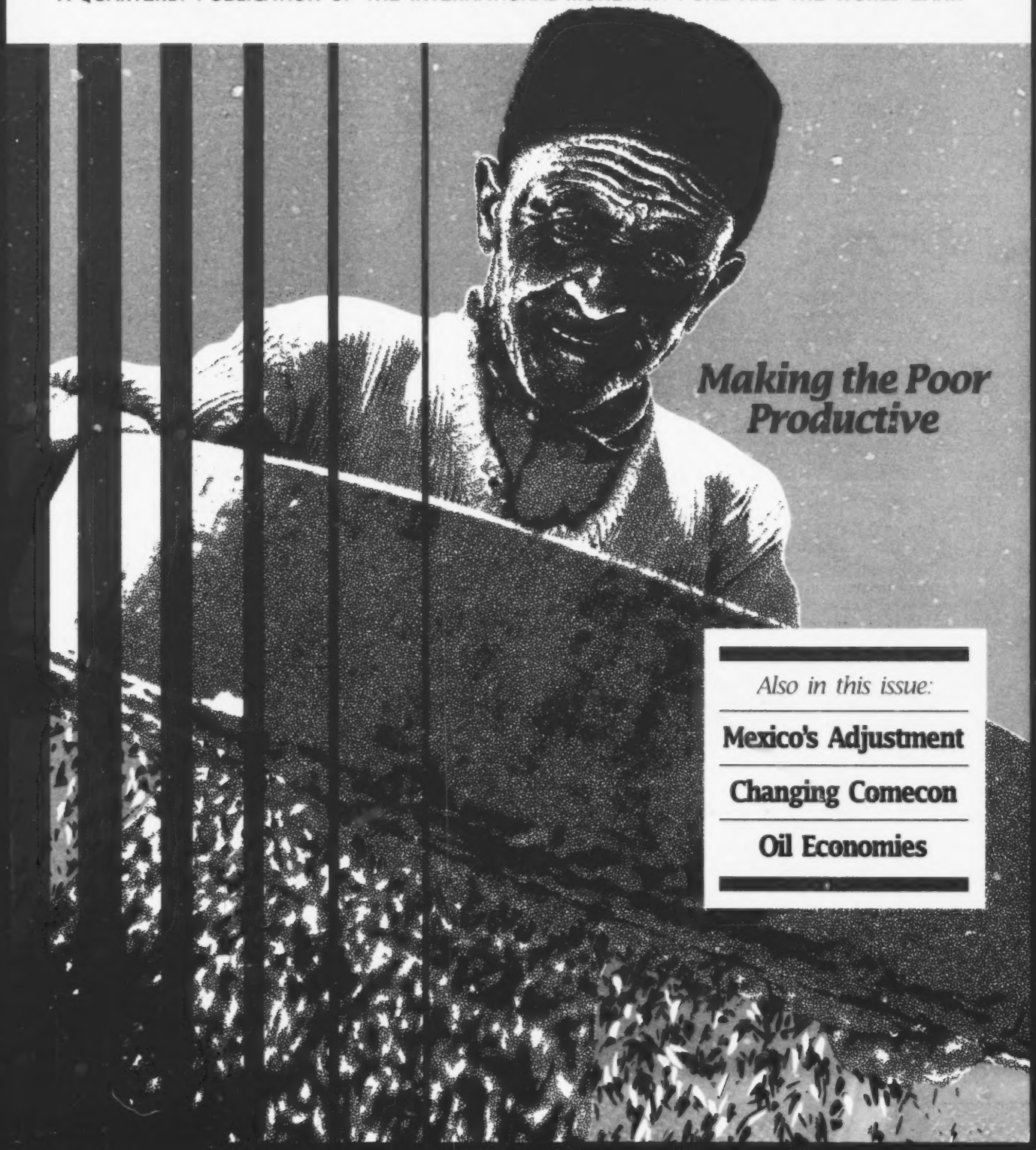
FINANCE & DEVELOPMENT

A QUARTERLY PUBLICATION OF THE INTERNATIONAL MONETARY FUND AND THE WORLD BANK



Making the Poor Productive

Also in this issue:

Mexico's Adjustment

Changing Comecon

Oil Economies

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Looking Back...

External assistance for the developing countries was a major topic of the 1960s.

In March 1965 we published an article ***"Rich Lands, Poor Lands: Recollections and Reflections"*** *by Escott Reid, then Director, Department of Operations—South Asia and the Middle East, of the World Bank.*

Here are excerpts from that article:

In giving their aid to poor countries, the governments and peoples of rich countries are constantly faced with the necessity of deciding between hard and soft ways. They can provide aid for hard projects or for soft projects. A hard project is one which a careful, expert investigation has shown to be well-conceived, well-designed, and well-engineered and which is likely to result in increases in production in the poor country that are commensurate with its real economic cost to that country.

A soft project may serve better in the short run the prestige of the government that gives it and of the government that receives it, but its real benefit to the economy of the poor country can be low. A typical soft project is the monumental large dam for irrigation which will not result in much increase in production because it is not accompanied by adequate subsidiary irrigation channels, by adequate grass-roots research on what crops should be grown on the newly irrigated land and what particular variety of seeds should be used, or on how much water should be used at various times of the year for each type of crop on each type of land in the area, or by setting up effective methods of teaching the farmers how to use the water.

...A great Western European statesman was talking to me a few years ago about the economic development program of a poor country whose president had just been visiting him. He said: "This country has a very sensible development program." He paused. "No steel plant." His simplification was the simplification of the political realist. For that country at that time to include a steel plant in its development program would have been to demonstrate that it was not serious in its efforts to raise the standards of living of its people.

The governments of rich countries can make the very hard decision to give their aid to poor countries not just in the form of grants and loans but also by opening their markets to the goods of the poor countries. They can give a reasonably large proportion of their aid through international agencies, or they can give almost all of their aid bilaterally and tie it to the purchase of their own goods and services. When their aid is tied to the purchase of their own goods and services they can turn a blind eye when their contractors and suppliers, not having to meet international competition, charge prices higher than they would on contracts subject to international competitive bidding. Or they can make the hard choice of deciding that, though their bilateral aid will be tied, the prices charged for such tied goods and services must not greatly exceed world levels.

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Combating Poverty: Experience and Prospects

Providing economic opportunities for the poor and building up their capacity to take advantage of those opportunities can help reduce poverty and ensure sustainable growth

Michael Walton

Over a billion people—a third of the population of the developing world—are living on less than $370 per annum. While conditions may improve substantially in East and South Asia over the next decade, other parts of the world may show lesser gains, or even declines. Lack of income generally coincides with inadequate social conditions: the poor suffer from high child mortality, poor health, and limited education. Life expectancy in Sub-Saharan Africa—the poorest region of the world—is 50 years; it is almost 80 in Japan. Mortality among children under five in South Asia exceeds 170 deaths per thousand; in Sweden it is less than ten. Over 110 million children in the developing world lack access even to primary education; in developed countries anything less than universal enrollment is regarded as unacceptable. These averages may not accurately reflect conditions of the poor, who almost invariably are at lower levels of health and education.

The *World Development Report, 1990* examines the conditions of the poor and how they can be influenced by government policies and the international community. Coming a decade after the last *World Development Report* devoted to this topic, it has been able to draw on considerable experience and research on poverty and assess the implications for the poor of the macroeconomic difficulties that many countries faced in the 1980s. The principal conclusion of the Report is that the most effective strategy for reducing poverty involves two, equally important, parts: creation of income-earning opportunities for the poor, through a pattern of growth that encourages the efficient use of labor; and increasing the current welfare of the poor and their capacity to respond to opportunities through provision of social services. A critical complement to this strategy is the provision of transfers and safety nets to help those who do not benefit quickly from the two-pronged attack on poverty, and to deal with shocks at the household, community, and national level.

The World Development Report, 1990 is a Bank staff report prepared by a team led by Lyn Squire and comprising Ehtisham Ahmad, Robert L. Ayres, Gary Fields, Helena Ribe, Mark Sundberg, Jacques van der Gaag, Dominique van de Walle, and Michael Walton. The International Economics Department prepared the data and projections. The work was carried out under the general direction of Stanley Fischer.

Copies are available from World Bank Publications, P.O. Box 7247-8619, Philadelphia, PA 19170-8619 USA, $14.95, in English, French, and Spanish.

Who are the poor?

Poverty has many dimensions: inadequate incomes, malnutrition, lack of access to social services, and lack of social and political status. The poor are heterogeneous, across and within countries. But some generalizations can be made on both the extent and nature of poverty.

Defining poverty as the inability to attain a minimal standard of living, the Report constructed two indices based on a minimum level of consumption and standard of living. The first index was a country-specific poverty line, the second was global, allowing cross-country comparisons. This second index produced a low and a high poverty line covering an income range of $275–370 per person per year. The results for the higher line show poverty incidence to be the worst in South Asia and Sub-Saharan Africa, at about one half the total population, compared with about 20 percent in East Asia and Latin America. In terms of numbers, South and East Asia account for two thirds of the total poor in the developing world in 1985. Social indicators are strongly associated with poverty incidence (see Table 1).

Understanding the nature of poverty is

important for policymaking and analysis. In terms of both incomes and social conditions, poverty remains much worse in rural areas. The rural poor often account for 80 percent of all the poor in Africa and Asia, though somewhat less in the more urbanized countries of Latin America and developing Europe. They lack assets, especially land and human capital (i.e., skills and education). Incomes of the poor mainly come from unskilled labor on their own small plots of land, agricultural employment, and low-paid work in the rural nonfarm and urban informal sectors. While many of the poor live in intrinsically fertile areas, some—and possibly rising numbers—live in resource-poor regions where poverty, environmental problems, and population growth tend to interact perniciously.

Children are particularly vulnerable under poverty; a poor child's lack of education and weaker health status increases the probability that he or she will become a poor adult. Despite their crucial role in determining the quality and character of subsequent generations, in many areas, poor women suffer from lower status, less access to education, and greater demands on their labor (including household responsibilities) than their male counterparts. The ability of the poor to cope with their difficult circumstances is severely limited by the chronic shortage of resources available to them.

Has poverty declined?

While the conditions of the poor are grim today, in most parts of the world there has been major progress in reducing poverty over the past 25 years. Over 1965–85, life expectancy rose from 50 to 61 years and net primary enrollment increased from 73 to 84 percent of the primary school population in the developing world. Improvements in social conditions occurred in all regions. Outside Sub-Saharan Africa, there has also been comparable progress in increasing the incomes of the poor. Data for 11 countries, that account for close to 50 percent of the world's poor, indicate that in every case the proportion of the poor in the population declined and the average incomes of the remaining poor rose over the 15–20 year-period examined for each country (see Table 2). This was true even in countries that pursued inegalitarian development paths, such as Brazil and Pakistan. In Indonesia, the proportion of the poor in total population fell a remarkable 41 percentage points in only 17 years. In India, the pace of decline of poverty incidence was relatively slow so that the numbers of poor people rose.

There are two major qualifications to this picture. First, Sub-Saharan Africa shows a long-term decline in the incomes of the poor, despite some progress on social indicators. Second, the experience of the 1980s was more mixed. It is often called a "lost decade" for development and especially for the poor. For the poor living in South and East Asia there were further increases in incomes and continued progress in social indicators. But for many countries in Latin America, Sub-Saharan Africa, and Eastern Europe, poverty worsened in the wake of macroeconomic decline. Social indicators were somewhat more resilient in these countries. In Latin America, progress in basic health and education indicators continued and even quickened, despite cutbacks in public social spending. In Sub-Saharan Africa, the evidence is much more limited, but it points to a slowing of progress in child mortality and some decline in average primary school enrollment.

Table 1
Poverty and social indicators in the developing world, 1985

	Poverty		Social indicators		
	Percentage of poor in population (In percent)	Number of poor (In millions)	Under five mortality rate (Per 1,000)	Life expectancy (In years)	Net primary enrollment (In percent)
Sub-Saharan Africa	47	180	196	50	56
East Asia	20	280	96	67	96
China	(20)	(210)	(58)	(69)	(93)
South Asia	51	520	172	56	74
India	(55)	(420)	(199)	(57)	(81)
Eastern Europe	8	6	23	69	90
Middle East and North Africa	31	60	148	61	75
Latin America and the Caribbean	19	70	75	66	92
All developing countries	33	1,116	121	62	83

Source: *World Development Report, 1990*, World Bank.

Lessons of experience

How does government policy affect the pace of poverty reduction? Assessment of past country experiences supports the case for the two-part strategy involving government intervention and the creation of safety nets for the poor. The story is relatively simple in the case of social aspects of poverty and more complex for the incomes of the poor.

Government intervention. Effective government action is the key to improvement in social conditions. This requires making adequate budgetary provision for the social

Table 2
Changes in poverty over time in selected countries

		Percentage of poor in total population		Number of poor (In millions)	
		First year	Last year	First year	Last year
Brazil	1960–80	50	21	36.1	25.4
Colombia	1971–88	41	25	8.9	7.5
Costa Rica	1971–86	45	24	0.8	0.6
India	1972–83	54	43	311.4	315.0
Indonesia	1970–87	58	17	67.9	30.0
Malaysia	1973–87	37	15	4.1	2.2
Morocco	1970–84	43	34	6.6	7.4
Pakistan	1962–84	54	23	26.5	21.3
Singapore	1972–84	31	10	0.7	0.2
Sri Lanka	1963–82	37	27	3.9	4.1
Thailand	1962–86	59	26	16.7	13.6

Source: *World Development Report, 1990*, World Bank.

READEX FICHE

sectors, ensuring access of the poor to resources and facilities (either through widespread provision or effective direction of benefits toward target groups), and efficient delivery systems. Progress is often associated with growth, as in Malaysia, Indonesia, and Thailand, but there is no necessary link. Some low-income countries—notably China and Sri Lanka—and middle-income countries—for example, Chile, Costa Rica, and Colombia—have achieved social conditions well above the norm for their income level through effective and sustained public action in the social sectors. Such countries show what can be done for social development even in the absence of growth. By contrast, high growth in the absence of effective government action in the social sectors, does not bring commensurate gains in social development. Brazil and Pakistan illustrate this.

Public policy has more complex, but no less powerful, effects on the incomes of the poor. The central factor is the interaction between the poor's changing physical and human assets and the opportunities created by the growth process. Government policies influence the poor's asset holdings, notably through education and land reform, and the pattern of growth, which in turn determines the demand for unskilled labor and the output of the poor. Initial conditions also play a powerful part in determining the effects of government actions on the poor: an even distribution of land and incomes helps ensure that the poor benefit more from growth. But success in poverty reduction in all types of countries has been associated with a combination of efficient labor-promoting growth and strong support for human resource development.

Indonesia, starting with a relatively equal distribution of land and incomes, pursued a strategy that involved widespread provision of education and other social services, and strong support for rural development. This encouraged rapid labor-intensive growth that further improved the distribution of income. By contrast, India—also with relatively equal land and income distribution—invested less in the human capital of the poor and had stronger biases against labor in industry. It also experienced less rapid rural expansion and showed a much less rapid decline in poverty.

Among countries with initially unequal distribution of land and incomes, the successful ones in the war against poverty over the past 25 years—Colombia, Thailand, and Malaysia—also pursued heavy investment in human capital and encouraged efficient labor-intensive growth in agriculture, industry, or both. Colombia, for example, experienced a particularly sharp reduction in inequality. By contrast, Brazil pursued policies that led to relative neglect of the human capital of the poor and sustained the high degree of initial

Poverty in 2000

The projections in this year's *World Development Report* for the incidence of poverty in the year 2000 give cause for moderate optimism. They assume continuation of past growth in developed countries, resolution of the debt crisis, and some shift in favor of the two-part strategy against poverty in countries that have followed more inegalitarian policies in the past. However, any improvements in income distribution are expected to be moderate, in line with the historical experience of countries that succeeded in reducing inequality.

While all projections should be treated with caution, the results are striking. They suggest that East Asia could see the virtual eradication of poverty as we know it, and South Asia could achieve substantial progress. Reductions in the incidence of poverty are also likely in Latin America, the Middle East, and North Africa, but the numbers of the poor in these areas may not diminish. Sub-Saharan Africa could suffer an increase in the numbers of the poor of 85 million between 1985 and 2000. If all these changes occurred, Asia's share of world poverty would decline from 72 to 53 percent, while Africa's would double from 16 to 32 percent.

Favorable prospects in Asia depend crucially on India sustaining the momentum of the 1980s and China tackling its current difficulties and restoring the reform process. Failure to resolve the debt crisis could lead to another decade of stagnation in Latin America and no progress on poverty incidence in this region. But the plight of Sub-Saharan Africa is clear. The central projection already assumes a growth rate of almost 4 percent per annum and, as discussed in the recent report *Sub-Saharan Africa: From Crisis to Sustainable Growth*, even this will require a major effort to sustain and deepen structural adjustment, restore basic services, and build capacity, supported by increased aid flows. Holding the numbers of the poor to current levels would require a growth rate of 5.5 percent per annum. Yet the position of many African countries today is not radically different from that of Indonesia in the late-1960s, when that country was emerging from a period of severe macroeconomic instability, failed growth, and internal violence. Its success in reducing poverty in the past two decades is an indication of what could be achieved in Sub-Saharan Africa, given the right kind of domestic policies and external conditions.

The outlook for social indicators also presents contrasts, but here there is potential for progress in all regions. Primary enrollments are expected to grow everywhere if long-term trends continue. Child mortality rates could fall substantially everywhere, but would still remain well above 100 per thousand in Sub-Saharan Africa.

But the short-term trend of slow progress in social indicators in Africa during the 1980s, if it continues into the 1990s, could lead to primary enrollments in 2000 of only 46 percent (compared with 86 percent for the long-term trend), and a child mortality rate of 153 per thousand (compared with 136). A substantial expansion of social spending levels and rehabilitation and expansion of health and education services will be required to avoid these declines. While this is possible without an acceleration in growth (as the historical experience of other countries has illustrated), both the feasibility of the required changes and the benefits to the poor would be immensely eased by a sustained recovery in Africa.

The year 2000: declining poverty, except in Africa

	Percentage of poor in population (in percent)	Numbers of poor (in millions)
Sub-Saharan Africa	43.1	265
East Asia	4.0	70
China	(2.9)	(35)
South Asia	26.0	365
India	(25.4)	(255)
Eastern Europe	7.9	5
Middle East and North Africa	22.6	60
Latin America and the Caribbean	11.4	60
Total	**18.0**	**825**

Source: *World Development Report, 1990*, World Bank.
Note: See Table 1 in article for 1985 figures.

inequality. It has had a much lower decline in poverty than would have been the case with policies similar to those of, say, Malaysia.

Where radical land redistribution has been effectively implemented—as in the Republic of Korea and Japan—it has directly benefited the poor and then helped lay the basis for the subsequent pursuit of the two-part strategy. It is clearly desirable in inegalitarian societies and deserves external support. Unfortunately, it is rarely feasible politically. Weak and gradual land reforms (which are more common) have generally failed to substantially reduce poverty.

Transfers and safety nets. The consequences of transfers and safety nets are less clear at the national level. Many countries that have swiftly reduced poverty, including Indonesia and Malaysia, have maintained moderate levels of transfers to the poor. These did not appear to impede growth, nor did they have a major impact on the poor. In a few—for example, Jamaica and Sri Lanka—subsidies have amounted to a significant portion of national resources. While they helped improve the welfare of the poor, well over one half the transfers went to better-off segments of society.

Reaching and involving the poor. National development strategy is critical, but its effectiveness is strongly influenced by the extent to which public policy and intervention—in providing economic services, social services, and transfers—take account of the needs and circumstances of the poor and involve them in the design and implementation of programs. Among other things, this may involve agricultural research that takes account of the risks and farming environment of poor peasants, or health programs that allocate sufficient resources to rural clinics. There is also increasing evidence of the value of the direct participation of the poor, often with help from nongovernmental organizations.

Adjustment and the poor. The recession and debt crisis of the early 1980s severely disrupted the growth process of many countries. Varying country experiences illustrate the consequences of alternative policy responses to short-run difficulties. The approach to macroeconomic adjustment can have a major influence on outcomes for the poor. The most successful responses have involved a combination of swift and effective changes in policies to provide the framework for restoration of growth and macroeconomic measures to cushion the impact on private consumption. In many cases, relative price changes that encouraged efficient growth—and a growing demand for labor—also brought short-run benefits to the rural poor, especially where small farmers accounted for many of the poor. This was the case in countries such as Costa Rica, Ghana, Indonesia, and Malaysia.

Even with well-designed macroeconomic policies, some of the poor suffer in the short run, making the case for targeted transfers. The most promising policy instrument for this purpose is special employment schemes. These have been used to good effect to provide income relief for the urban poor in Chile and Peru, and for the rural poor in parts of South Asia and Africa, especially in the context of droughts.

Why is Africa different? A review of the past 25 years indicates that Sub-Saharan Africa's experience has, for the most part, been distressingly different from the rest of the developing world. Yet its relative failure in poverty reduction can be illuminated by the same factors that help explain success elsewhere. First and foremost is the pursuit of inappropriate growth strategies. While Indonesia and Thailand were investing heavily in a supportive environment for rural producers, Ghana and Tanzania were pursuing state-led, capital-intensive industrialization, with strong biases against agriculture and other labor-intensive sectors and in favor of capital and import-intensive activities. Failures in economic development made these African countries particularly vulnerable to the shocks of the 1970s and 1980s. They entered a downward spiral until a combination of policy change and external support initiated a recovery in the mid-1980s. African countries that pursued a more balanced—and hence less anti-labor—path, such as Cameroon and Kenya, achieved better agricultural and industrial growth. They almost certainly did better for the poor.

Major African efforts in human resource development after independence produced substantially greater progress in social indicators than in the incomes of the poor. But the failure to grow had two severe consequences for human resource development: first, the beneficiaries of expanded social services lacked the opportunities to convert their enhanced capabilities into higher incomes; and second, by the 1980s national decline meant fewer resources for the social sectors. In many countries, this contributed to a steady decay of national education and health services.

Prospects for policy changes

Tackling poverty is difficult and Africa's problems are daunting. But the success of countries that have pursued effective policies in the past is immensely encouraging. In assessing the political feasibility of adopting policies that will help the poor, the question of tradeoffs is important. Country experience indicates that there need not be significant tradeoffs between an effective poverty-reducing strategy and economic growth. There are strong complementarities between expansion of the human capital of the poor, encouragement of efficient, labor-promoting growth, and improvements in aggregate income levels. But clear conflicts may arise with the better-off segments of society.

The two-part strategy advocated in the 1990 Report is clearly redistributive: expanding free or subsidized social services, and putting effective transfers and safety nets in place for the vulnerable involves government spending that must be financed by taxation or reduced services to the better-off members of a population. Shifts from an inefficient, capital-intensive growth path also hurt former beneficiaries among the richer segments of society. The poor are intrinsically weak politically since power is associated with economic position. But the experience of countries, such as Colombia, Indonesia, and Malaysia (or more recently Ghana), that have pursued the two-part strategy points to its political feasibility, even when the apparent political power of the poor is weak. More radical solutions, such as expropriatory land reform, could lead to swifter progress in countries where inequality is severe, but there is much less likelihood that this will be politically feasible.

The conclusion of the *World Development Report* is that effective action by developing countries, with international support, can lead to a substantial reduction of world poverty by the end of the century (see box) and could, if with greater difficulty, hold the numbers of the poor in Sub-Saharan Africa to their current levels. There will be costs for the better off, but these are massively outweighed by the advance in human welfare that a sustained attack on poverty would bring. ■

Michael Walton
a British subject, was a member of the team that produced this year's World Development Report.

Policies for Reducing Poverty

Some countries are beginning to improve economic opportunities for the poor and provide them with essential social services

Dominique van de Walle

Recognizing the immense waste of human resources within their economies due to poverty, some developing country governments have begun to change their approaches toward development to include the poor as clearly identified targets of official programs, financed by domestic resources or external aid. The lessons from their successes and failures, captured in the *World Development Report, 1990*, offer some hope for the poorest of the world.

As mentioned in the preceding article by Michael Walton, country experience indicates that poverty is most effectively reduced when domestic development policies stress two key components: a pattern of growth that encourages the efficient use of labor and the provision of social services to the poor. However, some of the poor will not be reached by these policies, and others will remain vulnerable to shocks. A well-targeted system of transfers and safety nets, therefore, is needed in a comprehensive poverty reduction program. A country's development strategy and stage of development, the extent and nature of administrative and physical infrastructure, and the salient characteristics of the poor in each country will determine the precise role and optimal combination of these policies.

Promoting economic opportunities

How can governments encourage growth that fosters the efficient use of the factors owned by the poor? The answer is the first key to long-term poverty reduction. One way is through the price mechanism. Relative prices matter to most of the poor. Increases in the relative price of goods that more intensively use the labor of the poor encourage growth in sectors that employ such labor and so raise the returns to the single most important asset of the world's poor: their capacity for work. The external terms of trade of developing countries, and the net trading position of the poor within those countries can interact powerfully to influence the benefits the poor obtain from the pattern of growth.

But overvalued exchange rates, excessively capital intensive industrialization, and artificially low relative prices of agricultural outputs can severely hamper efforts to reduce poverty, as evidenced by the experience of Ghana in the 1970s, and of Nigeria, Senegal, and Tanzania, more recently. In contrast, Cameroon and Kenya avoided heavy taxation of agriculture and performed comparatively well in terms of growth of agriculture, manufacturing, and per capita GDP.

Infrastructure development has been found to increase the productivity of the rural poor. Improved transport and marketing networks have spurred growth in agriculture and helped develop and diversify the economies of backward areas in many countries. The spread of irrigation and the adoption of high-yielding varieties and other forms of technological progress in Asia and Latin America vastly increased employment opportunities for the poor, and helped stabilize their incomes over the agricultural calendar. In India, Indonesia, and Pakistan, rural wages also rose as a result. However, certain rural development policies may bring far fewer gains to the rural poor than others. For example, agricultural policies favoring large farmers and subsidies to mechanization have had quite opposite effects in Brazil.

A buoyant and secure agricultural sector, in turn, increases the demand for nonfarm goods and services and helps create jobs in nonfarm activities. Bank research indicates that a one dollar increase in agricultural income was linked to an 80-cent increase in incomes from nonfarm sources in certain rural areas of India and Malaysia that had well-developed infrastructures.

Infrastructural development and a supportive policy environment can also promote growth in urban labor demand and hence, wages. Access to low cost public utilities, for example, has been linked to the growth and success of small firms in Colombia and the Republic of Korea. However, licensing regulations and urban planning ordinances can restrict self-employment opportunities for the urban poor and more generally inhibit informal sector activities. Such policies need to be carefully implemented and monitored so as to avoid their adverse effects on the poor.

Participation of the poor. To enhance the ability of the poor to participate in the growth process, it is often necessary to implement policies that provide greater access to resources and opportunities for productive investments. In agriculture-based economies, improved access to land would directly benefit poor households. Although major redistribution of land ownership is not usually feasible politically, smaller land transfers, tenancy, and tax or subsidy reforms have at times improved access along with earning opportunities.

When the poor own land, necessary inputs, such as irrigation, fertilizers, and pesticides, can be made available to expand the productivity of the land. Further, improving poor farmers' access to markets and providing transport, information, and technological innovations suitable for small-scale farming, enables them to respond to economic incentives. A few rural development projects have effectively reached the poor in India, Pakistan, the Philippines, and Sri Lanka, by building local institutions, involving village organizations, and delegating responsibility to participants.

The provision of credit to the poor through innovative and effective channels can aid these policies, but past experience suggests that such interventions often do not reach the poorest or yield reasonable returns. Where these initiatives have worked, such as Bangladesh's Grameen Bank—a nongovernmental institution that provides credit mainly for rural nonfarm enterprises—success has depended both on the scheme's design (Grameen's use of group-based lending) and the ability and concern of its managers.

Social services: investing in people

Investment in human capital is the second key to the long-term reduction of poverty, complementing the policies suggested above for achieving a pattern of growth favorable to the poor. Despite encouraging progress in developing countries at the aggregate level, many of the poor within these countries continue to lack access to even the most basic human services. Policies and earmarked budgets have often failed to reach them because of inefficient spending and biases toward programs that benefit the rich. For example, an estimated average 70 to 85 percent of total health care spending (public and private) in developing countries goes to curative care (mainly for a minority—the better-off urban dwellers). Yet, preventive and community services have been shown to be more effective in reducing morbidity and mortality.

The satisfaction of basic needs directly alleviates some of the most severe consequences of poverty. Healthy, well-nourished, and educated individuals obviously have a higher standard of living than sick, hungry, and ignorant ones. They are also more productive and better able to respond to new opportunities. Improved nutrition and health, for instance, increases the time the poor are *able* to work.

Such investments in human capital have other important effects too. The education of mothers is linked to declines in infant and child mortality, as well as improved child

Profiles in poverty: three families

Behind all the numbers and policy pronouncements hides the reality of a hard life for the world's poorest. This year's *World Development Report* casts its discussion of policy options for governments attempting to improve the lot of the poor against the backdrop of past and new empirical evidence on household characteristics, often from interviews. The following profiles of three families illustrate some typical settings in which the policies discussed would have an important role.

In Ghana: A subsistence farmer's household in Ghana's Savannah region consists of seven members: husband and wife, their three children, and his mother and father (60 and 70 years old). The family lives in three barren mud brick huts with earthen floors, on the three acres of land that it owns. There is no toilet, electricity, or running water.

The family raises food and a meager cash crop on unirrigated land of poor quality. The family lacks access to fertilizer and other modern inputs. During peak periods, all family members pitch in, while at other times of the year, there is little to do. The husband's periodic journey to the market town to sell their cash crop and purchase a few essentials is hampered by distance and the lack of roads and transport.

The older Ghanaian family members never received any schooling, but the eight-year-old son is now in the first grade. The family hopes to be able to keep him in school, though there is pressure to keep him at home to help with the farm in the busy periods. He and his two younger sisters have never had any vaccinations, nor even seen a doctor.

In Peru: This poor urban household is in a shantytown on the outskirts of Lima. The shack is made from various scraps of wood, iron, and cardboard. The family of six—mother, father, and their four children—shares one bed, a table, and two benches. They cook with a small kerosene stove and have no toilet or electricity.

The elder two children go to the shantytown school, recently built by a local nongovernmental organization. When necessary, they take morning and afternoon turns at school so as not to leave the house unattended. The children were given polio and DPT (diphtheria, pertussis, and tetanus) inoculations when a mobile clinic came to the shantytown. Some public services are provided. Garbage is collected, and water is delivered to households that have a cement tank, which this family has not yet built. For now, the women of the family fill buckets at the nearby public standpipe.

The father works in construction on a casual basis. The work is uncertain but other (lower paying) informal sector jobs, requiring unskilled labor, are generally available. The recent economic recession has limited work all around. A new bus service that connects the shantytown with other parts of the city now enables his wife to make the long trip to a wealthier neighborhood where she earns cash doing laundry.

In Bangladesh: A poor landless laborer's household ekes out a living in a drought-prone rural region. The family sleeps on straw on a packed mud floor, protected by a flimsy straw roof. The land on which the shack stands and the little plot surrounding it were lent to the landless laborer, his wife, three children, and niece, by a neighbor.

The nine-year-old son attends school a few mornings a week in a town an hour's walk away. He is the first family member to ever go to school. The town is also where the nearest public services are found. The mother once took her sick son to the clinic there; the medicines they gave him were very expensive, though he did get better. The daughter does not go to school, staying home to help her mother and look after the baby when her mother or cousin cannot.

The household relies on the father's wages as an agricultural day laborer. During slow agricultural periods in the past, he could usually find nonagricultural wage labor, in construction, for example, in a nearby town. But he is weak, following an illness, and can only provide petty services around the village for a very low return. His wife tends the few spices and vegetables they grow on the small amount of land around their house and is always on the lookout for ways of earning a little extra. Tasks such as husking rice, weeding fields, and chopping wood, are sometimes available from better-off neighbors.

Source: World Development Report, 1990, *Chapter 2.*

nutrition, which, in turn, affects a child's ability to learn and perform at school. Family planning services enable parents to better plan and space births, thereby improving both maternal and child health. In the long run, more education produces acceptance of family planning and lower fertility.

Better access for the poor. Building and developing the necessary physical infrastructure—roads, primary health clinics, and primary schools—is a top priority, particularly in rural areas. Clean water supplies and other basic sanitation and disease control are also critical.

Social sector expansion, however, will not automatically benefit the poor. There must be changes in the priorities, organization, and financing of social services. Social sector reforms initiated in Chile after 1974–75 illustrate this. Expansion coupled with increased targeting to vulnerable groups and decentralization of the health care delivery and elementary school systems resulted in wider coverage of the poor. For selected services, including higher level education and curative care, Chile also introduced greater reliance on cost recovery. As with rural development projects, local community participation in the social sectors is found to be effective in countries as disparate as Bangladesh, Colombia, Nicaragua, and Thailand, and should be encouraged.

To ensure participation of the poor, it is also critical to consider their circumstances. For example, although the long-term benefits of education are perceived by most poor parents, children are indispensable productive assets in the short term (as labor on family farms, for example). Policy instruments may be necessary to improve the incentives for parents to keep children, and particularly female children, in school. The use of payments to parents in one region of Bangladesh increased the proportion of female secondary school students from 27 percent of the total to 44 percent, double the national increase.

Transfers and safety nets

The policies discussed so far are likely to miss some of the poor. The aged and the disabled will rarely participate in the process of future growth, while the full participation of others—poor households in remote and inhospitable regions, or those whose very low wages adjust only slowly—will take time. In addition, the poorest households remain vulnerable to fluctuations in income and shocks caused by events beyond their control.

Targeted transfers can help raise the living standards of those who are missed by other efforts, while a safety net, providing some form of income insurance, can see poor households through short-term stress and calamities. Well-designed policies, broadly categorized as food-based policies, public employment schemes, and social security, can serve these objectives. They represent a crucial complement to the two-part strategy.

The role of food pricing and distribution policies. Since food is the major component of the expenditures of the poor, food-based policies are an obvious way to raise living standards and nutritional well-being, as well as to insure the poor against a sudden fall in real income. Developing countries have experimented with various schemes, including general food subsidies, food rations, food stamps, food distribution policies, and food supplementation schemes. There have been both successes and failures.

Most food-based policies have worked best in urban areas or more developed regions with effective administration and infrastructures. These policies have often failed to reach the rural poor. Jamaica's food stamp program is one of the exceptions. It has been successful at reaching poor and vulnerable groups, due, in part, to a well-developed primary health care system (through which food stamps are distributed) and a sophisticated social welfare administration. Targeting food subsidies can increase cost effectiveness and has been achieved through required attendance at public clinics, as in Jamaica; by subsidizing food staples that are mainly consumed by the poor, such as coarse flour in Egypt; or by locating distribution outlets in poor neighborhoods, as was done in Northeast Brazil and the Philippines.

In remote areas with poor access to markets, direct food distribution is often necessary during crises and to help individuals recover from severe malnutrition. In normal times, supplementary feeding programs can assist vulnerable groups, particularly when administered through existing social infrastructure and combined with complementary health, sanitation, and education interventions involving community participation. The World Bank-assisted Tamil Nadu Integrated Nutrition Program and Tanzania's Iringa Nutrition Program are good examples of such efforts.

Public employment schemes. Carefully designed public employment schemes have proved to be successful at supporting the incomes of the able-bodied poor and their families, particularly in risky agricultural settings. They have been used for famine prevention in India for centuries and in Sub-Saharan Africa during the 1980s, most successfully in Botswana and Cape Verde. In Latin America, Bolivia, Chile, and Peru implemented public works projects to help the poor through structural adjustment.

Public employment programs, providing unskilled work on rural development projects in lean seasons, have often been effective in reaching the poor at relatively low administrative cost. Only the poor tend to find attractive the work and wages offered. In India's Maharashtra State, the Employment Guarantee Scheme guarantees unskilled work in rural areas to anyone who requests it subject to only mild restrictions on feasibility. This has provided valuable insurance to the rural poor, as well as helped develop backward areas of the state. The building and maintenance of infrastructure and the rehabilitation of environmentally degraded lands has served to spur employment creation elsewhere in the economy and facilitated social sector development.

Social security. In many urban areas, and in countries where the formal wage employment sector is large and wide coverage is achievable, social security systems can be effectively used to reduce poverty among the aged poor and those unable to work. This has indeed happened in Chile and Costa Rica. However, broad-based formal social security systems are not yet feasible in most developing countries, and least of all in rural areas. A practical alternative is to target transfers using correlates of poverty and community participation in assessing needs. This approach is used in India's Kerala state, where a pension scheme provides agricultural laborers over 60 with self-reported income below a stipulated level. Local committees help verify applicants' claims.

When properly adapted to each country's situation, and designed to be mutually reinforcing, the above policies could greatly enrich the lives of the poorest people in the world. But good policy ideas are not all that is needed. It will take concerted political and social will and a supportive international environment to attain the reduction of poverty that is possible with the right policies. ■

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Foreign Aid and Poverty Reduction

Aid works well, in general, but the report card on poverty shows mixed results. Developing countries received $51 billion in concessional assistance in 1988, roughly half their net receipts of external capital. Where aid has been well employed, it has benefited the poor through a number of channels: agricultural research and extension; the construction of rural infrastructure, such as farm-to-market roads; the provision of primary education, basic health care, and nutrition programs; and relief from natural and man-made disasters.

Shortcomings

But the contribution of aid to the reduction of poverty has not always come up to its full potential because of a number of reasons.

- Donors, especially bilateral donors, have many different motives—political, strategic, commercial, and humanitarian. Reducing poverty is often not stressed. As a result, about 40 percent of aid still flows to middle- and high-income countries, and there is little relationship between per capita aid allocations and the extent of poverty in individual countries.
- Donors prefer to finance physical capital installations that help their own firms and exporters. They are reluctant to support the operating (or "recurrent") costs of undertakings financed by aid. But many poverty-related initiatives are in sectors such as health and education that demand a high level of recurrent expenditures.
- Some recipients—including Haiti, Sudan, Tanzania, and Zaire—have fallen into "aid dependency." Tanzania, for instance, received $8.6 billion in concessional assistance over 1970–88, but growth declined and poverty increased as a result of inappropriate macroeconomic and sectoral policies. Aid donors are partly to blame for failing to monitor programs carefully or to make assistance commensurate with policy reform.
- Many poverty-oriented projects do not reach the poor because of lack of government commitment to helping poor people, inappropriate sectoral and macroeconomic policies, frequent shifts in donor concerns, insufficient attention to institutional development and local capacity building, and a failure to involve the poor themselves in projects designed to assist them.

Per capita aid receipts, selected countries, 1988
(In US dollars)

Country	Aid received per capita	GNP per capita
Israel	282.07	8,650
Jordan	108.95	1,500
Gambia	102.63	220
Senegal	78.85	630
Zambia	63.73	290
Egypt	29.91	650
Nepal	22.05	170
Ethiopia	21.05	120
Syrian Arab Republic	16.34	1,670
Bangladesh	14.62	170
Pakistan	13.32	350
Myanmar[1]	11.22	—
Indonesia	9.34	430
India	2.58	330
China	1.84	330
Nigeria	1.09	290

Source: Development Assistance Committee of the OECD and the World Bank.
[1]GNP per capita estimated at less than $500.
—Indicates data not available.

More effective use

Despite these shortcomings, some notable progress has been achieved at both the country and project levels. Aid can, however, be made a more effective instrument of poverty reduction. The main way in which this can be achieved is by linking aid more directly to countries' overall policies.

Thus, major aid flows should go to countries that are attempting to pursue policies that generate income-earning opportunities and efficiently provide social services for the poor. In such countries, aid can assist the public sector through balance of payments support linked to public expenditure restructuring, "time-slices" or phased release of aid money in support of public expenditure programs, and discrete investment projects. Aid should also increasingly support the private sector in these countries, since this sector is central to growth in labor demand.

Countries that have large numbers of poor people, but where public policies are not conducive to poverty reduction, need to direct limited quantities of aid toward the poorest target groups. The goal is to protect the welfare of the poor as far as possible, while efforts to reform country policies continue. Thus, aid could support health clinics serving poor women and children, immunization programs for children, or well-targeted feeding programs. Much of the work of multilateral and nongovernmental agencies, such as Unicef and Oxfam, in Ethiopia, Kampuchea, Sudan, and elsewhere, is precisely of this kind. The World Bank is also undertaking such work—in Zaire, for example.

Many countries represent intermediate cases, that is, they are making some effort to help the poor, but could do more. If provision of social services to the poor is lacking in these countries even in the face of income gains, aid might be tailored to efforts to improve social services. In other countries, aid might be directed toward maintaining the stock of physical capital, while efforts are made to encourage growth-oriented policies that increase labor demand.

A convincing case for more aid can be made, but only if more recipient countries seriously try to reduce poverty and aid donors implement the lessons of experience. Aid would increase to $64 billion in the year 2000 if it continues to grow at 2 percent a year in real terms (the projection of the OECD's Development Assistance Committee), and as high as $144 billion if the widely accepted international target of aid as 0.7 percent of GNP were met by donors currently below it (with those above it maintaining their current proportions). ■

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Aiming for "High Quality Growth"

In a statement before the United Nations Economic and Social Council in Geneva, on July 11, 1990, the Managing Director of the IMF, Michel Camdessus, spelt out the Fund's aim in helping its developing member countries. Protecting the poor and enhancing their productivity are high priorities.

Here are excerpts from that address:

Our prime objective is growth. In my view, there is no longer any ambiguity about this. It is toward growth that our programs and their conditionality are aimed. It is with a view toward growth that we carry out our special responsibility of helping to correct balance of payments disequilibria and, more generally, to eliminate obstructive macroeconomic imbalances.

When I refer to growth, I mean high-quality growth, no pseudo-growth. . . . There have been many instances of the latter over the past 20 years, which helps to explain how the world is now, that is, not only very insufficiently developed, but also wrongly developed. Allow me to explain what I mean by pseudo-growth.

- There is "flash-in-the-pan" growth, fueled by inflation and financed through excessive borrowing or—even more harmfully—by the accumulation of arrears, which amounts to willful destruction of countries' external creditworthiness.
- There is growth for the privileged few, leaving the poor with nothing but empty promises.
- Finally—and my list is far from comprehensive—there is forced quantitative expansion, pursued through the disorderly exploitation of natural resources and the ravaging of the environment.

In contrast, the growth objectives found in our programs . . . are . . . concrete and meaningful, and our every action is aimed at orienting the efforts of all parties—the countries concerned, their friends, their creditors and ourselves—toward high-quality growth.

What does this mean? At least part of the answer lies beyond the boundaries of economics. For economic growth, in its broadest sense, is too rich in meaning, too complex, and too essential to mankind's future to be left only to economists.

Sustainable growth

High-quality growth means, first of all, growth that is sustainable in that it does not crumble in the face of the slightest external shock. It means growth with domestic and external financial stability. It means growth that is dynamic and that creates the conditions for future expansion by enhancing investment—in human capital in particular. High-quality growth is concerned with the poor, the weak, and the vulnerable. Finally, it is growth that does not wreak havoc with the atmosphere, with the rivers, forests, or oceans, or with any part of mankind's common heritage. In a word, high-quality growth entails working together to achieve a complex set of economic and social goals: neglecting any one would ultimately endanger the others.

This said, the means by which this high-quality growth is achieved—be they economic, social, or political—are perhaps as important as the ends. The downturns experienced in many developing countries that had temporarily achieved relatively high growth rates in the 1970s are instructive in this regard. They show that growth founded on inflationary policies and excessive external borrowing and which is not built on broad-based and creative participation of the largest possible part of the population, but on the pre-eminent, if not exclusive, initiative of the State, is deprived of its essential driving force.

One of the opportunities facing us in the 1990s, one of the aspects of this "new deal" which must serve as our point of departure, is that a much broader consensus has emerged with regard to the objective of high-quality growth. This objective, this guiding ideal of growth, is highly ambitious. How can we achieve it? By reflecting on the unconvincing experiments and failures of the past and by drawing lessons from them. The most important lesson is that it is necessary to revitalize simultaneously the two key components of international cooperation: namely, more credible national policies and international support that is equally credible. We cannot but set our sights higher, as regards both policies and the support for them.

More credible national policies

. . . High-quality growth will not be achieved in the absence of "bold reformism." Severe disequilibria and inappropriate structural adaptation must be addressed promptly and on all fronts, and the public must know the hard facts about the scope of the problems and the policies chosen. Let us not ascribe the virtues of gradualism to foot-dragging policies or to policies aimed at preserving vested interests or flaws in the established order. We must recognize the need for change, as well as set out the principles for it. Postponing change would be worse than the disease itself; it would cause the continued economic deterioration of economies, not their recovery. What can be done to win public support, how would it be possible to gain the support of the creditor or donor community? This is not the time to soft-pedal reform, but rather to support carefully crafted programs which attack the problem at its roots. This is the focus of the programs supported by the Fund. . . .

These programs involve, first and foremost, macroeconomic discipline, beginning with the reduction of fiscal deficits and monetary measures aimed at achieving price stability and realistic exchange rates. Such discipline is essential. It has taken us far too

long to shake off two dangerous misconceptions of the 1970s: first, that monetary stability and growth are at odds with one another; and second, that external financing—borrowing—is the best path to growth. The experience of recent years shows clearly that the countries making the greatest strides are those that borrowed prudently and steadfastly resisted inflation. A recent Fund study of 88 net debtor developing countries found that those with high inflation during 1983–89—that is, with inflation in excess of 15 percent—had an average investment ratio that was one third lower than that of low-inflation countries (18 percent versus 27 percent). What is even more striking is that real income per capita stagnated in the high-inflation countries, whereas it grew by more than 4 percent a year, on average, in countries with low inflation. . . .

Macroeconomic discipline goes hand in hand with structural reforms that are designed to promote efficient resource use and to remove the most deep-rooted and stubborn obstacles to growth. Here I refer to reforms that eliminate damaging distortions in tax systems, prices, interest rates, and exchange rates; reforms that provide incentives for competition and private initiative; that improve public enterprise efficiency; that open up foreign trade and foreign investment; that enhance the quality of investment—and not only its quantity; and reforms that cut back to a minimum, administrative intervention and, with it, corruption.

Reforms and the poor

Often, and quite properly, questions are raised about the impact of such policies on the poorest and the most vulnerable. Let me say outright: these policies serve the poor, and we must do our utmost to implement them if we are to be efficient in our fight against poverty and all it entails.

First, we should ask ourselves what happens to the poor without such discipline, without such reforms? How do the poor, who have little or no assets, fare when runaway inflation is set loose by easy money policies? When factories close down because of overvalued exchange rates? When there is no incentive to produce crops because state monopolies pay prices that do not cover the costs of production? The answer is both obvious and tragic. The poor are the first hit, the worst hit, and the least able to protect themselves.

In contrast, the reforms to which I referred can and must improve the lot of the poor. This observation is based not on theory, but on examples from our experience. For example, higher producer prices raise the incomes of poor farmers; more efficient supply arrangements, which reduce costs, have a similar effect; and fiscal reforms which raise revenues and restructure public expenditures by reducing excessive military outlays and all other wasteful spending, and which increase productive investment, enable governments to provide more appropriate social services. . . .

The fact remains that the transition from an economy ridden with imbalances and rigidities to a high-quality growth path is always difficult and can sometimes take longer than we tend to believe. Some policies that are necessary for this transition may hurt some of society's vulnerable groups in the short run. With the governments concerned, we are making a serious effort to contain and mitigate such ill effects and to introduce appropriate "safety nets." We are striving to improve the design of our programs to ensure a better blend of adjustment, growth, and equity and, in particular, to ensure that the plight of the poor is properly recognized. During fiscal retrenchment, for example, we encourage governments to avoid raising taxes on the basic staples consumed by the poor; to protect critical social expenditures on health, education, and nutritional programs; and to compensate or support the retraining of workers who are laid off. We also make provisions in programs, whenever the financing is available, for subsidies that target vulnerable groups—free meals for children, income supplements for the elderly and the disabled, and housing subsidies for the homeless, to cite but a few examples. Similarly, we are focusing our thoughts and efforts toward improving the way environmental concerns are addressed within the framework of the programs we support.

Rational economic policies and the defense of the environment have to be mutually reinforcing. Experience has shown overwhelmingly that ineffective policies lead to shortages and the overuse of natural resources, with disastrous environmental consequences, not to mention what is perhaps the most grotesque assault on the environment—the accumulation of military hardware in the poorest countries.

But let us not be mistaken. Social safety nets and ecological safeguards are not added to programs on the cheap. These options have their costs. And these costs cannot be properly covered, even in part, by increasing deficits or by money creation. The ambitious aim of quality cannot be achieved unless we are prepared to finance it. The two best ways to do this are:

- First, through greater national solidarity; in particular, when there are large differences in wealth, could one not increase taxes paid by the richer part of the population?
- Second, through more vigorous savings efforts; the question here is whether there are further unproductive expenditures that can be sacrificed? For example, must Africa really continue to devote more than 5 percent of its GDP to military and national security spending? Obviously not. And it is clear that any country that is not perceived by the international community to have firmly embarked on a strong effort to cut spending to a reasonable level will stand little chance of obtaining sufficient international support, even for its most justified expenditures. In saying this, I would like at the same time to acknowledge how difficult it is in practice to reorient government spending. This requires bold political choices. When these choices are made, they must be supported. ■

Poverty Concerns in Fund-Supported Programs

An orderly adjustment process is essential for improving the longer-term position for the poor. Some measures to mitigate the short-term negative impact of adjustment programs are also needed

Sanjeev Gupta and Karim Nashashibi

It has become increasingly clear since the 1980s that growth and orderly adjustment are essential to any effort to reduce the incidence of poverty. Because of this, the Fund has been paying greater attention—especially since 1986—to poverty concerns in its adjustment programs. By assisting countries in the design of adjustment programs, the Fund has attempted to promote sustained growth in program countries, while minimizing the possible adverse impact of certain policy measures on the poorest. There is also a growing recognition among policymakers in member countries that the effectiveness of any economic program in promoting structural change and sustained growth rests, in large part, on its social acceptability. This article draws on the experience with the design of about 50 Fund-supported programs under stand-by, structural adjustment facility (SAF), extended structural adjustment facility (ESAF), and the extended Fund facility (EFF) that were or became operational in 1989 and 1990.

Fund-supported programs

The principal aim of the Fund-supported adjustment programs is to align domestic demand with the availability of resources in the short term and to pave the way for an efficient and sustainable growth performance with stable prices over the medium term. The restoration of internal and external financial balances may require, inter alia, raising tax revenues and cutting expenditure as a part of the adjustment policy package. In addition, specific policy measures (including exchange rate devaluation) may also be needed to shift relative prices in favor of tradable goods. These measures may have positive effects on the poorer segments of the population in many countries. At the same time this may also cause prices of consumer goods to increase, and in doing so, reduce the real income of certain groups.

Such a fall in real income may be particularly damaging to these poorer groups, who have little, if any, access to safety net provisions. Consequently, many Fund-supported adjustment programs now aim to include measures to mitigate, fully or partially, the short-term negative impact on such groups. It should be stressed, however, that failure to adjust holds far worse consequences for the poor, making them bear the full brunt of a high rate of inflation and extensive price controls. Further, although the Fund assists in the design of the appropriate macroeconomic framework, the social choices that are inevitable in this process are left to the countries themselves.

What can be done?

The poor are understood to include groups of households at the bottom of the income and expenditure categories (see article by Michael Walton). The effects of an adjustment program on these vulnerable groups, however, may not be uniform. For example, an increase in the prices of tradables may improve the conditions of the rural poor by raising their income, while worsening the plight of the urban poor by reducing their purchasing power. Diversity in the distribution of poverty and the difficulty in identifying the poorest groups, as well as quantifying the impact of adjustment measures on their consumption levels, undoubtedly complicate the task of policymakers engaged in designing measures to protect the poor.

Fiscal policies should aim at broad-based and efficient taxation to mobilize resources for essential public expenditures. Yet, in some cases, keeping in mind the need to protect the purchasing power of the poorer groups, Fund programs have attempted to avoid tax increases on basic staple commodities (e.g., food items) and exempt levying of consumption or excise taxes on such commodities. For those rendered unemployed in the public sector as a result of expenditure cuts, the program could provide some monetary compensation or, alternatively, contain provisions to assist them in finding other means of livelihood (see article by Dominique van de Walle). The reform measures could

also protect budgetary expenditure on social services such as health and education for the poor.

The impact of higher food prices could be cushioned by supplying staple foods at officially fixed prices to well-defined poverty groups and by meeting the cost of this subsidy from the budget. Those in higher income brackets could bear the brunt of the price increases, including increased taxation of items such as gasoline, to finance such subsidies. In some cases, however, it may be possible to supply to these groups cheaper yet nutritionally superior commodities (e.g., brown instead of white sugar, or wheat with higher bran content), thereby lowering the burden on the budget. Compensatory measures would typically involve some costs (e.g., provision of separation grants to departing civil servants) on the budget requiring external financing or fiscal retrenchment in other areas, if sufficient resources cannot be raised through additional taxation.

Alleviating measures

Over the last two years, many Fund-supported macroeconomic programs have included measures to shield the affected poor population. These measures are not necessarily designed by the Fund, but are fully integrated in the budgetary framework negotiated with the Fund. The measures adopted tend to be partly influenced by the authorities' desire to alleviate the adverse adjustment impact on some influential groups (e.g., government employees) who may not be necessarily the poorest, and partly by the availability of financing from external as well as internal sources for this purpose. In many instances, external financing has been specifically earmarked to support programs for helping the poor during the adjustment period.

The Fund staff has collaborated closely with World Bank staff on the social aspects of adjustment in SAF and ESAF programs, drawing on the latter's extensive experience in this area. This explains the commonality of measures adopted in Bank and Fund programs, even in countries not having SAF and ESAF programs.

Policy mix. The need to finance schemes aimed at alleviating the impact of adjustment on the poor often requires taxation or price increases. In some instances, the impact of these measures on the poor population has been minimized by a judicious combination of policies. In Jordan, for example, prices of essential items were not increased following the 1989 devaluation, and the resulting budgetary subsidies were financed through revenue measures imposed essentially on the richer segments of the population. A uniform wage allowance was granted to all civil servants in Guinea, which effectively doubled the purchasing power of the lower income earners, to partially offset the higher prices of rice and petroleum products stemming from the devaluation. In early 1989, the Bolivian authorities mitigated the increases in public utility tariffs and tax on beer (heavily consumed by the poor in relation to their income) by granting concurrently a 15 percent increase in public sector wages, with spillover effects into the private sector.

In Sri Lanka, the elimination of subsidies in 1989 through adjustment of administered prices was gradually phased in. The removal of subsidies on wheat flour was spread out one year, while that on rice was stretched over six months. At the same time, excise duties and turnover taxes were raised on tobacco, alcohol, and luxury items. However, since the economic program incorporated certain compensatory schemes equivalent to around 3 percent of GDP, it became clear that much greater selectivity in targeting the poor needed to be exercised to reduce the financial burden on the budget. More recently, in Mozambique, the authorities decided to grant income supplements to the poorest urban households to partly offset the effect of rising prices.

Rationing and targeting of subsidies. To counter the adverse impact of changes in relative prices, more pointed targeting and subsidization of basic commodities has been used in Fund-supported programs. A food rationing system subsidized through the budget was set up in Mozambique in 1989 to help casual and informal sector workers in urban areas, and the much larger rural population. Additionally, specific distribution controls were imposed to ensure availability of consumer goods in the rural areas. The Venezuelan program included an extensive and elaborate system of food subsidies of the seven commodities purchased mainly by the poor (cornflour, rice, noodles, sardines, powdered milk, animal feeds, and fertilizer). However, as is often the case, it is envisaged that these subsidies would only be provided temporarily until the economy picks up sufficiently and the poorer groups have the opportunity to restore their real income levels.

Another example of subsidy targeting has been in Guinea, where lower income groups have benefited from a temporary subsidy for urban transport to counter increased fuel prices. A similar principle has been used in electricity consumption in Bolivia, where low-income consumers have been shielded from the surcharge on commercial and residential electricity use by making it applicable only beyond specified consumption levels.

Expenditure on social services. Several countries have attempted to mitigate the adverse short-term effects on the poor by either protecting or strengthening social expenditures in the budget. This has included rehabilitating rural health centers (e.g., Ghana), expanding rural health services (e.g., Guinea), improving staffing of the primary health care facilities of the community-based health system (e.g., Malawi), improving health and education services for the vulnerable groups (e.g., Guinea-Bissau), providing low-cost housing (e.g., Jamaica), and strengthening agricultural support facilities (e.g., the Philippines). In Bangladesh, Bolivia, Guinea, Malawi, and Niger, the programs laid special emphasis on primary or basic education. In this context, the Malawian program aims at enhancing the access to education of girls and reducing their drop-out rate from schools.

In addition, other schemes, such as creating new job opportunities for the poor through public employment schemes, resettlement of the public servants made redundant, and nutrition programs for those who are likely to suffer during the period of financial stringency have also been included in the program design (see following article by Helena Ribe and Soniya Carvalho). Some programs have also called for initiation of supportive measures that could improve the well-being of the poor households (e.g., population planning in countries such as Bangladesh, the Central African Republic, Madagascar, Malawi, Mozambique, Nepal, Niger, and Zaïre).

Mitigating adverse effects

The various ways mentioned above in which governments have responded to poverty concerns as part of the Fund-supported economic stabilization programs constitute a first broad approach to mitigating the direct impact of program measures, such as increases in prices or reductions in public employment or subsidies on certain poverty groups.

The limitations of some of these approaches are easy to understand. For instance, alleviating the impact of public sector employment retrenchment can be justified on the grounds that public sector employees, particularly in Africa, maintain extended families with a large number of dependents. On the other hand, workers in the informal sector in rural or urban areas may have been even more adversely affected than public sector employees through the price effects of the adjustment program. Similarly, public employment schemes may only capture a small segment of the poorer groups, while neglecting a possibly larger segment of rural wage earners who may not have access to

such employment schemes. Maintaining expenditures on social services is important, but there is a need to scrutinize the distribution of these expenditures following the adjustment program. For instance, some shift in spending from the large urban health facilities to primary health facilities in the more disadvantaged, possibly rural areas, may be warranted, if the impact of the program is likely to increase the level of poverty in such areas.

The need to go beyond the maintenance of broad social programs, or the support of partial mitigating measures, has led to efforts toward a more refined approach that can narrow down those groups among the very poor who would be most affected by Fund-supported stabilization and adjustment programs. The challenge here is in attempting to trace to the micro level the impact on the poor from changes in policies at the macro level.

The first task in this respect is to obtain the data necessary to identify who the poor are and what they consume. In a country where the majority of the population is poor, it is necessary under the existing budgetary constraints to identify the poorest who should receive immediate protection. In this respect, the Fund staff is building a data base to construct brief profiles of the poverty situation for many of the member countries, drawing on official data and information available from relevant international institutions and nongovernmental organizations.

The second task is to quantify the impact of policies on the poorest groups and explore ways in which such an impact could be minimized through improvements in program design. For instance, if it is found that the consumption of those who are at a bare subsistence level would drop by, say, 20 percent as a result of an increase in the price of basic foodstuffs (e.g., rice and vegetable oil), several alleviating options may be considered in the design of the program: first, provided financing is available, it may be possible to maintain the domestic prices of these commodities with an explicit budgetary subsidy, while eliminating subsidies on less essential items. This may be inefficient to the extent that the relatively better off would also benefit from the subsidy. In a second phase, prices could be decontrolled with the introduction of a targeted scheme to provide such commodities at lower prices only to the neediest groups. Alternatively, an income maintenance program for the targeted groups could be designed (e.g., food stamps).

If the social safety net is well designed, it is likely that financing may be found from external donors for both phases. Otherwise, further fiscal measures, such as higher taxes may have to be imposed to attain the macroeconomic objectives. Such taxation could be imposed on commodities consumed by the richer groups, but options for mobilizing sufficient resources from these groups are often limited. Another possibility would be to attain the intended reduction in demand and changes in relative prices through tighter fiscal and monetary policies coupled with a more moderate exchange rate depreciation. This would result in a slower pace of price increases. The disadvantage of this approach is that fiscal and monetary instruments would be used to attain objectives more effectively reached through a devaluation and would result in a larger cut in domestic demand than warranted, with adverse employment and growth consequences. Finally, commodities provided through aid could be made available to the poorest groups. This would moderate price increases for certain tradables, but may have the disadvantage of reducing incentives for domestic production and in the long run slow down the increase in domestic supply.

There is little doubt that adapting the program design to alleviate the short-term impact on certain groups of the poor, may affect the pace of stabilization as well as growth prospects in ways that are difficult to trace. There is also a risk that tradeoffs among macroeconomic policies might involve changes in the burden of adjustment among different poverty groups or intertemporally. However, a program that protects the health and nutritional levels of groups already at the bare subsistence level would not only be a moral imperative, but would also strengthen the broad social acceptability necessary for economic reform to succeed. ■

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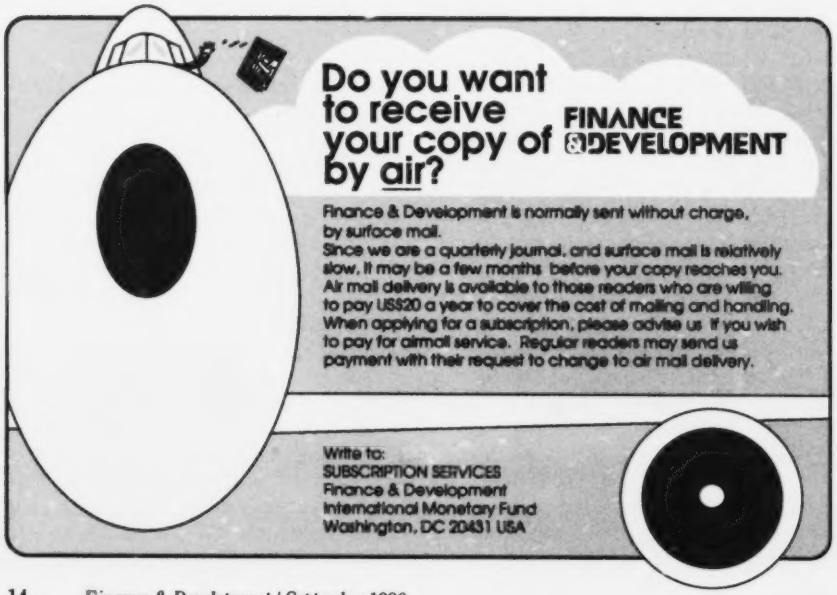
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Adjustment and the Poor

Experience from the Bank's lending for structural reforms

Helena Ribe and Soniya Carvalho

Since the beginning of the 1980s, economic difficulties have led many developing countries to implement adjustment programs to correct policy distortions and structural imbalances. In the early years, little attention was given to the possible adverse impact of adjustment programs on the poor. This was to a large extent justified by the expectation that adjustment programs would facilitate growth, and in the process reduce poverty. With the passing of time, however, it became evident that the economic problems were more severe than expected, that adjustment was slower than anticipated, and that many countries, particularly in Sub-Saharan Africa and Latin America, were experiencing prolonged periods of economic stagnation and deteriorating social conditions for some groups.

This led the international development community to renew its attention to poverty reduction and emphasize the need for policies and programs to improve incomes and standards of living of the poor during periods of limited growth. This focus underscored the importance of protecting the welfare of those who may be hurt by adjustment programs and of the chronically poor (not necessarily the same group) for the success, and the political viability, of the adjustment process itself.

The Bank's efforts

The nature and extent of the impact of adjustment programs on the poor has been hard to establish empirically. This is largely because of the difficulty in distinguishing the direct costs of adjustment from the costs of unfavorable exogenous shocks and inappropriate past policies.

Recent studies carried out by the World Bank (see box) have not confirmed that adjustment programs are systematically associated with worsening poverty and social indicators. One study, for example, concludes that available evidence shows that changes in living conditions of the general population in the short run do not appear to be related to adjustment lending. But the analysis is based on aggregate data and, therefore, has not established the extent to which particular groups may have been adversely affected.

It is possible that some adjustment measures have an adverse short-run impact on specific groups of the poor. The adverse impact may result from reductions in public expenditures, increases in the prices of goods and services consumed by the poor, and declines in employment or real wages in sectors in which they work. Nevertheless, a clear lesson from experience is that not adjusting is likely to reduce living standards and that an orderly adjustment process designed to promote growth and efficient resource allocation is indispensable for improving the longer-term position of the poor.

The Bank, in concert with other multilateral agencies, such as the IMF, and bilateral development agencies, has assisted countries to adapt to changing circumstances, increase economic opportunities for the poor, and mitigate any adverse short-run impacts of adjustment programs on the poor. Major interventions have included targeted projects aimed at specific groups (such as employment, nutrition, credit, training, resettlement, and severance pay schemes) and social sector reforms to increase the efficiency and access of the poor to basic services. Labor market reforms and targeted subsidies have also been supported in some cases. Relatively less attention has been given, however, to analyzing the mix, sequencing, and timing of macroeconomic policies that promote a pattern of growth that is most conducive to long-run poverty reduction, as well as to the overall composition, incidence, and effectiveness of public expenditures and their implications for poverty reduction.

This article is based on Ribe et al, "How Adjustment Programs Can Help the Poor," *Discussion Paper No. 71, The World Bank, 1990; World Bank,* "Adjustment Lending: An Evaluation of 10 Years of Experience," *Policy Research Series No. 1, 1988; and World Bank,* "Report on Adjustment Lending II: Policies for the Recovery of Growth," *forthcoming; and the* World Development Report, 1990. *It also draws on several internal sources and from work for the Social Dimensions of Adjustment project undertaken by UNDP and the World Bank.*

Social sector expenditure reforms. A number of Bank-supported structural adjustment programs have attempted to protect the poor from short-term costs and enhance the beneficial long-term social impact of the adjustment programs by:

- maintaining or increasing expenditures on basic health and education, while overall public expenditures are cut. In Mauritania, for example, budget allocations to these sectors were given priority.
- redirecting expenditures toward the poor mainly through better targeting of resources toward primary education and basic health. For example, in Niger, the share of primary education was increased, although the total education expenditure was reduced and in Guinea, public resources were being redirected to rural health care and primary education.
- improving the efficiency of social sector expenditures. For example, in São Tomé & Principe, the efficiency of the delivery systems in health and education sectors were to be improved.

Chile and Indonesia provide good examples of social expenditure reforms in times of economic adjustment. In Chile, health and nutrition interventions contributed to a decline in infant and child mortality rates despite a 5 percent fall in public expenditures during the period of recession and adjustment. In Indonesia, overall development expenditures were reduced during 1982–87, but the share of expenditures on human resources increased (from 16 to 24 percent).

In some cases, comprehensive sectoral reforms have been initiated under Bank-supported sectoral loans, such as the ones in Argentina, Mali, Morocco, and Senegal. Typically, these programs are intended to improve services to the disadvantaged groups (e.g., improving basic schooling in rural areas); reduce unit costs (e.g., introducing double school shifts); build institutional capacity (e.g., training personnel); and improve quality (e.g., strengthening school curricula). Under the Primary Education Development Credit in Senegal, the sectoral adjustment component included specific actions to improve service quality and teacher performance.

Labor market reforms. Labor market regulations (such as minimum wages, job security, and social security regulations) are intended to raise worker welfare and security. But instead they tend to raise labor costs and reduce employment in the formal sector. Relatively little attention has been given in adjustment programs to remove such rigidities. Burundi and Senegal are among the few countries where attempts have been made at increasing labor market flexibility by allowing temporary labor contracts and eliminating requirements for government authorization to dismiss employees.

Targeting subsidies. Marketwide subsidies, which reduce the retail price of a good sold through regular market channels, have been a common and effective means of raising the real incomes of the poor. But such subsidies can be inefficient because they usually cover commodities whose consumption increases with income, hence primarily benefiting the better-off segments of society. Many reform programs have included a reduction in such general subsidies as part of an effort to reduce deficits. Quite naturally, some subsidy reductions have caused considerable hardship for the poor—particularly the urban poor.

Programs aimed at specific groups affected by adjustment measures represent an attractive option for addressing the possible adverse social impact of macroeconomic reforms.

Subsidies aimed at specific groups, however, by reducing the price of a good for individuals based on some indicator of need, can be both more effective in reaching the poor and less expensive for the government. Political and administrative constraints, however, have made such targeting difficult in practice and only a few countries have been able to introduce such schemes successfully. Nevertheless, experience has shown that targeting can be facilitated by selecting low-income neighborhoods (as in Mexico and the Philippines), readily identifiable groups (such as malnourished children and mothers), and commodities that are consumed mainly by the poor (such as cassava or certain grades of wheat and flour).

In a few countries, governments undertaking adjustment programs have improved the implementation of such schemes to protect the poor. For example, in Tunisia, subsidies on commodities that constitute a small proportion of expenditures by the poor (milk, sugar, and vegetable oil for soap-making) were reduced earlier than subsidies on wheat and cooking oil, which are widely used by the poor. Marketwide subsidies in Mexico have been replaced by targeted milk distribution, subsidies on commodities consumed mainly by the poor in selected geographic areas, and school feeding programs. Further, the removal of fertilizer subsidies was coordinated with changes in agricultural producer prices to protect poor farmers. Recently, in Venezuela, the Government has developed, with the help of the private sector, differentiated products to be marketed solely in poor areas at subsidized prices.

Implementing targeted projects

Programs aimed at specific groups affected by adjustment measures represent an attractive option for addressing the possible adverse social impact of macroeconomic reforms. This is, first, because they are limited ("targeted") to a narrow and clearly deserving group of beneficiaries and second, because they attempt to be highly cost-effective and efficient.

Targeted projects can include short- or long-run interventions. There is a clear rationale for short-term targeted projects to compensate groups adversely affected during the transitional period. Long-run projects generally require more time and may best be addressed in the context of the Bank's overall lending program to a particular country. However, since the adjustment period can prove to be quite long, short-run measures may sometimes be more successful if they initiate longer-term action. This is being attempted in Madagascar, Guinea-Bissau, and Chad. In Guinea-Bissau, for example, a drug distribution program is being carried out within the framework of a separate, larger program to reform the drug distribution system.

Since 1986, several targeted projects have been designed in countries undertaking adjustment. These have included mainly special employment programs, nutrition projects, redeployment programs (including training and credit projects), resettlement projects for displaced urban workers, and multisector programs. In a few cases, adjustment programs have supported population projects (Madagascar and Cameroon), housing projects (Guinea and Guinea-Bissau), and urban sanitation projects (Uganda, Guinea-Bissau, and Chad).

Special employment programs. These programs have been an effective way to reach the poor and provide a safety net for the unemployed in times of economic recession in Latin America and during the lean season in South Asia. While their main objective is to provide employment and basic security, employment programs can also help build and maintain local infrastructure.

Experience shows that these programs are generally more successful in reaching the

poor when the wages offered are less than the market wage. In Chile, the government-financed Emergency Employment Program (PEM) offered one-fourth to one-half of the minimum wage and succeeded in ensuring that two-thirds of its beneficiaries were from the poorest 20 percent of the population. By contrast, when market wages were paid in Bolivia, only less than half of the workers employed by the Emergency Social Fund (ESF) came from the poorest 40 percent of Bolivian households. Another lesson of experience is that when governments lack the institutional capacity to organize such programs aimed at the poor, mobilizing local groups and working with nongovernmental organizations (NGOs) can help increase administrative efficiency and ensure that benefits reach the needy. In Ghana and Bolivia, for example, the Bank has helped expand employment programs carried out by local NGOs.

Nutrition projects. Some adjusting countries have supported programs to compensate losses in the purchasing power of poor households and protect groups that are likely to suffer most—the urban poor, women, and children. By 1988, the ESF in Bolivia had approved 14 nutrition projects, including school feeding, mothers' clubs, and soup kitchens for adults and children. They benefited some 42,000 persons.

Targeting nutrition projects is difficult, but it can be facilitated by involving agencies that work at the grassroots level. This is being done in a number of countries, such as Chad, where the health component of the Social Development Action Program includes a nutrition program for women and children, which is being carried out by local social centers. Delivering nutrition supplements through the basic health systems can also be an effective mechanism, but requires a fairly advanced health sector. The distribution of milk and other food supplements by local health centers in Chile has resulted in major improvements in targeting and monitoring of maternal and child nutrition.

Redeployment program. The issue of unemployment stemming from fiscal retrenchment has been addressed rather prominently in Bank-supported adjustment programs. Projects have been designed to compensate dismissed workers and provide them severance payments, special credit, and retraining. For instance, compensation payments and bonuses were granted in Ghana, Guinea, Madagascar, and Togo. These programs are meant to protect the standards of living of retrenched workers during the period of transition while they find other jobs and sometimes to facilitate their entrance into new occupations or to self employment.

The use of severance payments may often be superior to special credit and retraining schemes (such as those designed in Ghana, Guinea, Mauritania, and Senegal), which have been generally more difficult to implement successfully. Subsidized credit schemes have generally failed and those that have succeeded rely on large organizational resources which are unlikely to work in the relatively short timeframe of adjustment programs. New training programs are also difficult to organize and should focus on improving existing training systems (as was done in Mexico) and on increasing the flexibility of the labor force, rather than on preparing displaced workers for specific new jobs.

Resettlement projects. Some adjusting countries have attempted to shift the newly unemployed urban workers toward agriculture. In Ghana, for instance, the resettlement project is intended to provide food aid and extension services to enable retrenched workers to move into unutilized but arable fields. In the Central African Republic, Ghana, and Guinea-Bissau, the public sector retrenchment was helped by external assistance specifically for this purpose.

Multisector programs. In some countries, targeted projects have been combined into multisector compensatory programs, including short-term interventions to provide relief (such as public works and feeding programs) and a range of developmental programs (ranging from urban sanitation to provision of textbooks). The most advanced and best-known Bank-supported programs are the ones in Bolivia, Ghana, and Madagascar. Others are being carried out or prepared in Benin, Burundi, Cameroon, Guinea-Bissau, Chad, Guinea, Senegal, Mauritania, Zaïre, and Uganda. They usually have multidonor financing and combine public sector, private, and NGO implementation.

The Bolivian ESF was initiated in 1987 and had disbursed about $135 million by early 1990. It was originally designed as a three year program, with funds from a consortium of external donors, including the Bank, to assist those affected by the prolonged recession and the adjustment program that followed—primarily displaced miners and public sector employees. The ESF was managed by a small and select group independent from other government agencies and funded demand-driven infrastructure projects implemented by private subcontractors and local groups.

The ESF was effective in disbursing external resources quickly to small local groups and NGOs with low administrative costs. But it did not reach many of its original target groups. In practice, many miners found employment elsewhere and ESF projects employed mainly unskilled construction workers, who were likely to come from low-income families, but were neither the poorest groups nor the most adversely affected by the adjustment program. The program, now in its third phase, has become an integral part of the country's long-term development program, aiming to reach the poorest groups in isolated regions.

The implementation of other multisector compensatory programs has been limited. Delays have been caused by the need for extensive coordination among several government agencies, NGOs, and external donors; by weak institutional arrangements; by difficulties in funding some of the subprojects; and by political problems. In some cases, however, separate components, such as the public works scheme in Ghana, are being successfully implemented.

Some of the more recent reform packages, for example the Social Action Programs prepared by the Social Dimensions of Adjustment program in Sub-Saharan Africa, are more integrated with national long-term programs (see article by Michel Noël and Ismail Serageldin). It is still too early to assess the effectiveness of multisectoral programs and, clearly, a great deal of additional work and experimentation are needed. This is an area where many questions remain, particularly regarding the more effective institutional arrangements and the appropriate mix of short-term and longer-term developmental programs. ■

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Tackling the Social Dimensions of Adjustment in Africa

Donors are working with African nations to bring the poor into the mainstream of development and to alleviate the immediate effects of adjustment programs on vulnerable groups

Ismail Serageldin and Michel Noël

Behind the economic aggregates revealing mounting debt and faltering growth and exports lies the day-to-day reality of life in Africa: crumbling roads, growing unemployment, clinics without medicines, schools without teaching materials—a reality of diminished prospects, especially for the poor. As African governments adjust their economies in the face of these realities, they confront two major questions: Beyond restoring growth over the medium- and long-term, how can macroeconomic and sectoral policy reforms be designed to meet the broader social objective of ensuring the participation of the poor in the process of adjustment and development? In the shorter term, how can vulnerable groups be protected during the adjustment process?

To support African governments in their quest to integrate poverty reduction policies and programs into their adjustment and development efforts, the United Nations Development Programme, the African Development Bank, and the World Bank launched the Social Dimensions of Adjustment (SDA) program in 1987. Since then, 12 other multilateral and bilateral agencies have become involved. Based on a comprehensive conceptual framework, the SDA program aims at improving macro and sectoral policy management, designing social action programs, strengthening national informational systems, and stepping up training and institutional development. The program is supporting each of these activities in 30 participating countries, with the mix of program elements determined by each country's specific needs.

Poverty-conscious reform

In an effort to help countries design poverty-conscious reforms, the SDA program has developed a framework which explicitly recognizes the links between macroeconomic policies and actual behavior and decisions made at the micro (or household) level. Using this approach, policymakers can craft a strategy that encompasses the social dimensions of adjustment and development programs. Thereby, they can design a better combination of short- and long-term measures for securing the livelihoods of the poor. The strategy consists of five essential elements:

- Investing in the households' human capital through nutrition, health, and education programs, as a basis for greater participation and growth;
- Increasing the households' productive assets, in order to increase the income of the poor;
- Raising the return on these assets, mainly through changes in relative prices;
- Promoting wage employment, especially for urban and nonfarm rural workers in the tradable sectors and helping those in the nontradable sectors to shift occupations; and
- Empowering the poor to expand their economic and social participation through community-based projects and other schemes that give them greater control over their own destinies.

The SDA program helps participating governments include social dimensions in the macroeconomic policy-making process at the earliest possible stage. At the outset, this may involve evaluating existing data to provide policymakers with social indicators that show how various socioeconomic groups are faring under adjustment. During the life of the SDA program, assistance is provided to systematically build up countries' policy-making and analysis capacity in line with evolving data and institutional conditions. Such work has begun in Togo and Tanzania. The emphasis is on developing operational tools that can feed directly into the policy-making process in order to make the designers of macroeconomic policy more conscious of its effects on poverty.

The program has also prepared Analysis Plans to provide government policymakers and planners with guidelines and methodologies for determining how adjustment policies affect key sectors. These plans attempt to establish the relationship between adjustment and a number of key topics and target groups. These include poverty profiles, employment and earnings, food security and nutrition, education, health, women, and smallholder farmers. Such plans are being produced in close collaboration with local research institutions in Côte d'Ivoire and Ghana.

Public finance reforms have a powerful effect on poverty. The SDA program helps participating governments design core public

expenditure programs to ensure that basic social services are delivered in a cost-effective manner and reach the most vulnerable groups in society. Once a government defines the kinds of expenditures it wants to protect, it can introduce specific budgeting procedures to clarify and systematize the translation of these priorities into public expenditure decisions. Expenditures can then be committed not only for the type of service or budget program, but also for a specific region or institution. This task goes beyond ensuring a certain level of government spending for each social service. Greater attention to efficient administration and delivery, the introduction of user charges based on the ability to pay, better provision of services to the poor, and a corresponding reduction of leakage of services to those who are better off—all can actually improve the quality of service to the poor even after overall expenditures have been cut. Such core public expenditure programs are currently being designed in Senegal and the Central African Republic.

Social action programs

Improvements in macroeconomic, sectoral, and public finance policies are necessary, although not sufficient, to achieve poverty reduction in Africa. Existing economic, social, and institutional impediments may diminish the ability of the poor to profit from the newly emerging policy environment. At the same time, vulnerable groups (e.g., the poorest, women, and young children) need to be protected through the period of adjustment. In addition, some other groups, who may not necessarily be poor, must be eased through the adjustment process. These groups include, for example, public employees who may be laid off as a result of adjustment measures.

To address these concerns, African governments are increasingly implementing, in conjunction with their policy reform programs, social action programs with two essential objectives:

- To foster greater participation of vulnerable groups in the process of socioeconomic development; and
- To mitigate the effects of adjustment on specific target groups.

The first category of interventions seeks to overcome the social and economic barriers that thwart economic participation by the poor. These actions are meant primarily to rehabilitate neglected infrastructure and debilitated support services and to promote community-based initiatives. In Cameroon and Guinea, the Governments have established, in conjunction with structural adjustment programs, community development funds to finance small-scale community initiatives, create employment, and provide basic services for the vulnerable groups. In Chad, the Government has established a loan scheme for very small businesses to be managed by nongovernmental organizations. This scheme is accompanied by technical support for such small enterprises.

The second category of interventions is concerned with protecting the welfare of specific groups during the initial phases of the adjustment process. These interventions consist of specific programs for vulnerable groups, including a food-for-work program, food distribution schemes to the neediest groups in Mauritania, and a special program to provide short-term employment for dislocated workers in Madagascar. Further, such actions may also cover transitional arrangements for laid-off public sector employees, as was done in The Gambia, Guinea, and Senegal.

National information systems

In order to make effective policies, decision makers need a clear picture of the various segments of the population in the course of the process of adjustment and development. Continuous planning and analysis, predicated on a national information system that provides a quantifiable measure of changes in key social and economic indicators for specific socioeconomic groups, are essential. Such information is needed not only at the macro level but at the sectoral and micro levels, too.

The SDA program is offering help with data collection and surveys to expand the quantity and improve the quality and reliability of data on social indicators. It has helped build a consensus in the international statistical community on a survey strategy to assess how households react to changes in policy and to monitor living conditions in households during adjustment. This survey strategy uses three complementary methods:

- A prototype integrated survey gathers information on the impact of adjustment on different household groups and establishes the relationships between macro policies and their effects on the household. This survey uses a detailed multisubject questionnaire on a relatively small, nationally representative sample;
- A prototype priority survey, based on a shorter questionnaire for a larger sample, identifies vulnerable groups and monitors changes in their socioeconomic conditions; and
- A prototype community survey provides baseline and monitoring information on product markets, labor markets, and social and physical infrastructure.

Ghana provides a good illustration of how an SDA survey program can be developed and integrated with current national survey activities. The Ghana Statistical Service has elaborated a four-year survey program with the support and advice of the United Nations National Household Survey Capability Programme, the Economic Commission for Africa, and the Bank's SDA Division. The program includes all three SDA survey methods. It also addresses national concerns about the recomputation of weights for consumer price indexes, expands the review of labor and employment issues, and provides details of informal sector activities.

Social action in Cameroon

A good example of the SDA Unit's work for the design and follow-up of social action programs is an $85-million project in Cameroon, formulated as an integral part of the structural adjustment program there. The social program under this project will support initiatives in health, education, population, employment, community development, and women in development.

Among other activities, a national employment program has been designed to channel public, private, and donor resources into counseling, apprenticeship, and vocational training programs—and to provide technical and financial support to small enterprises. A community development fund, administered by the Ministry of Planning in association with provincial authorities, is financing small-scale community efforts to create employment opportunities and provide basic services for vulnerable groups.

In line with the growing emphasis on integrating women into the process of development, the education service of the Ministry of Women and Social Affairs is running an information and education program. It is also working with other ministries in the design and management of the social action components for health, education, population, employment, and community development.

Institution-building and training

The long-term success of the SDA program will be ultimately measured by its ability to help participating countries develop their own capacity to design poverty-conscious macroeconomic, sectoral, and public finance strategies, and to effectively design and implement complementary social programs. Toward this end, the SDA program is supporting, as a contribution to the broader Africa capacity building initiative, a program of training and institutional development

focusing on the following elements:

- Improved capabilities for social policy analysis;
- Reinforced policy-making procedures; and
- Expanded participation by local groups.

This program supports training for civil servants and professionals from local research institutions in the areas of macroeconomic strategy, the design and analysis of adjustment programs and their effects on poverty, and public finance reforms. It also includes training for survey management and data analysis, and for the design of social action programs.

At the central level, institution-building efforts are supported to ensure that the results of policy analysis are thoroughly integrated into policy-making decisions. For example, the program supports the establishment of user's groups involving policymakers, analysts, and data producers in each participating country to provide feedback on the effects of policies on the poor and the vulnerable.

At the local level, the SDA program is exploring ways to associate the representatives of NGOs, private associations, and the academic community more closely into the design of social policies and programs. In three countries, poverty task forces have been established for that purpose. In Senegal, journalists have also been invited to participate. New institutional arrangements are being experimented with to avoid the traditional top-down approach in favor of decentralized program and budgetary authority for community or municipal organizations, NGOs, and other similar groups. An interesting example of this approach is the grassroots development initiative program in Togo, based on a partnership between the Government and the NGO community in support of NGO-sponsored projects.

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Conclusion

Programs of adjustment and development in Africa cannot be sustainable in the longer term unless the poor fully participate in the emerging economic environment. Adjustment programs provide the opportunity to focus attention on, and marshal efforts for, tackling the problems of the poor. The SDA program should help participating countries toward meeting the critical and mutually reinforcing goals of sustainable growth and poverty reduction. ■

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Increase in Fund Quotas Approved

A 50 percent increase in Fund quotas, or membership subscriptions, was approved by the Board of Governors of the IMF on June 28, 1990. As a result, total Fund quotas will rise from about SDR 90.1 billion (roughly $120 billion) to SDR 135.2 billion ($180 billion). This action marked the completion of the Ninth General Review of Quotas. The previous general increase in Fund quotas took place in 1983, when subscriptions were increased by 47.5 percent.

The new increase followed a recommendation by the Interim Committee, the IMF's advisory body, at its meeting in early May in Washington, DC, that the Fund's Board of Governors should approve a 50 percent increase in the total of Fund quotas in accordance with understandings agreed by the Fund's Executive Board and during the course of the Interim Committee meeting. The 151 member countries signified their approval by the formal vote of the Board of Governors.

The size of a member's quota in the IMF determines its voting power in the institution; it also influences the amount a member can borrow from the Fund when it encounters difficulties in its international finances, and determines the amount of its own currency that a member must provide in the form of subscriptions to the Fund. When a member's currency is used by the Fund, it receives a market-based rate of interest and an increase in its reserve position at the IMF. If a member should have a balance of payments need, it may use its reserve position at any time. The relative size of quotas also determines members' shares in any allocation of SDRs.

Quotas are expressed in terms of special drawing rights (SDRs), the Fund's accounting unit. (The SDR is a reserve asset that Fund members agreed to create in 1969. Its value is calculated daily, based on the market exchange rates of the world's five major currencies. On July 16, 1990, SDR 1 = $1.33957.)

As the world economy grows, and with it international trade and payments as well as the magnitude of the potential financing needs of individual countries, the Fund's resources must be enlarged to help maintain the Fund's central position in the international monetary system. That is why at intervals of not more than five years, the Fund's quota structure is reviewed and, if necessary, revised to better reflect changes in the world economy as well as changes in members' relative economic positions. The Tenth General Review of Quotas will be conducted not later than March 31, 1993, although it could be conducted earlier in case of a clear need to do so.

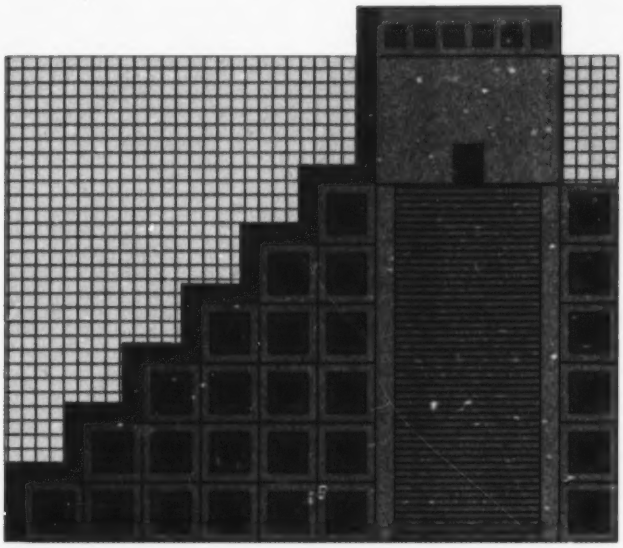
The distribution of the quota increase under the Ninth Review was guided by two main principles. First, all members should receive a meaningful increase in quotas and, second, the distribution should be based on methods that are applied uniformly to all members. In order to provide a meaningful increase in quotas and to help maintain a balance between different groups of countries, 60 percent of the overall increase in quotas will be distributed to all members in proportion to their present individual quotas. The remaining 40 percent will be distributed in proportion to members' shares in the total of the calculated quotas (i.e., the quotas that broadly reflect members' relative economic positions). The calculated quotas are derived from formulas that employ data on members' GDP, current account transactions, and official reserves.

As part of the Ninth Review, it was agreed also that there will be a realignment of the quota shares of the major industrial countries, which are among the biggest shareholders in the IMF. Under the new structure, the United States will remain the largest shareholder, with 19.62 percent of total quotas. The Federal Republic of Germany and Japan will be the next largest, each with 6.1 percent, followed by the United Kingdom and France, each with 5.48 percent of total quotas. Currently, the United Kingdom is the second largest shareholder, followed by Germany, France, and Japan. It was also agreed that Italy will have a quota share of 3.4 percent (the sixth largest shareholder after Saudi Arabia) and Canada will have a quota share of 3.2 percent. In addition, there was a special adjustment of the quotas of the Fund's smallest members (the 20 members with present quotas of less than SDR 10 million).

Two things must now happen for the increase to come into effect. First, the membership must approve an amendment to the IMF's Articles of Agreement, the international treaty that all members sign upon joining, to provide for the suspension of a member's voting and related rights if that member does not fulfill its obligations under the treaty. Second, individual members with 85 percent of total present quotas up to December 30, 1991, or 70 percent thereafter, must formally consent to the increase in their quotas, having taken the necessary steps under their laws to ratify the increase. These actions are expected to be completed by the end of 1991.

The quota increase will permit the Fund to maintain in the near future its ability to extend financing, particularly under its enlarged access policy. At present, around 50 countries—almost one third of the membership—are using financing from the IMF as they implement economic policies to counter their difficulties. Current borrowers from the IMF include a number of highly indebted countries like Mexico and Venezuela, which are attempting to restore strong growth to their economies; Eastern European members like Poland and Hungary that are moving their economies to a free-market basis; as well as many of the world's poorest countries like Ghana, Madagascar, Nepal, and Togo that are attempting to reverse many years of economic decline or stagnation. ■

A detailed article on the Ninth General Review of Quotas will be appearing later—Editor.



Mexico's Experience with Adjustment

After several attempts to overcome its economic difficulties since 1982, Mexico now has a strong chance of achieving sustainable growth with its recent economic program

Eliot Kalter and Hoe Ee Khor

After the onset of the debt crisis in 1982, Mexico launched a major policy effort aimed at correcting its macroeconomic and structural imbalances. Progress, however, was uneven, as the slow pace of structural changes hampered Mexico's adjustment efforts from 1982–88. It became apparent that a broad-based and sustained effort was required for Mexico to achieve durable macroeconomic stability and economic growth. In late 1988, Mexico accelerated the reform process, supported by the Fund and the World Bank, by formulating a comprehensive growth-oriented program based on the experience gained in the previous years. A combination of financial and incomes policies was supplemented by a wide range of structural reforms. At the same time, the authorities sought and obtained financial support from the international community, including significant debt and debt-service reduction, as part of a financial package arranged with the commercial banks (see accompanying article by Mohamed A. El-Erian).

The complex process of adjustment in Mexico since late 1982 provides a useful case study for other countries undertaking similar economic programs. The Mexican experience suggests that countries with macroeconomic imbalances and structural rigidities can return to sustainable growth and financial stability, but only by implementing wide-ranging economic and structural measures and by persevering with the reform effort.

Background

Mexico experienced rapid growth in the three decades through 1970, with the growth of real GDP, largely based on expansion of the private sector, averaging over 6 percent, or double the rate of population growth. However, because of a policy of increased government intervention in economic affairs, high fiscal deficits, and rigid exchange rate policies, Mexico began to experience severe balance of payments problems in 1976. The authorities subsequently embarked on an adjustment program supported by the Fund through an extended arrangement.

Aided by rapidly increasing oil production and prices, as well as large foreign financing, economic activity rebounded during 1978–81, with public sector spending providing the main impetus to the expansion of domestic demand. The high growth in government expenditure, an economic slowdown in industrial countries, and higher international interest rates combined to produce a large deterioration in the fiscal and balance of payments accounts by 1981. The fiscal and external deficits that resulted were financed primarily through substantial foreign borrowing from commercial banks, with net external public debt rising by $20 billion, or 60 percent, in 1981 alone.

The situation deteriorated further in 1982. The resulting squeeze on foreign reserves, accentuated by capital flight, forced the Bank of Mexico to withdraw from the foreign exchange market twice during the year, leading to a sharp depreciation of the peso. In August 1982, the authorities announced their inability to service fully the country's external debt. Subsequently, the Government imposed strict exchange and trade controls and nationalized the banking system, and Mexico began to develop external payment arrears on private sector debt service. The combination of a large public sector deficit and the lack of foreign financing led to a rapid acceleration of inflation from an annual rate of under 30 percent in 1981 to almost 100 percent in 1982. At this point, Mexico was a highly regulated economy with severe macroeconomic imbalances and limited access to external creditors. The challenge of economic recovery seemed daunting and prosperity almost out of reach.

In late 1982, a new administration under President Miguel de la Madrid adopted an adjustment program. This was supported by the Fund with an extended arrangement covering 1983–85, while Mexico obtained additional financial resources and a rescheduling of its external debt from official

and commercial bank sources. The program called for a major strengthening of financial policy and a liberalization of exchange and trade controls; it provided for a large initial devaluation, followed by frequent adjustments in the exchange rate based on projected inflation. The program's early achievements were considerable: internal and external imbalances were reduced greatly, while inflationary pressures declined. Moreover, economic activity began to recover.

But the improvement did not last long. By early 1985, it became evident that the initial adjustment efforts were not being sustained. Moreover, the efforts of the authorities were hampered by emergency spending necessitated by the September 1985 earthquake, as well as the sharp drop in the price of oil (from $25 a barrel in 1985 to an average price of $12 a barrel in 1986). As a result, the fiscal and external positions weakened, with public sector revenues and export receipts plummeting by the equivalent of about 6 percent of GDP.

In mid-1986, the Mexican Government responded to the worsening economic situation by adopting a new economic program, which the Fund supported with a stand-by arrangement. Financial support was sought from all of the creditors that had financed Mexico's development in the past, with a view to restructure Mexico's external debt from official and commercial bank sources and to offset the loss in export earnings. Fiscal and monetary policies were tightened, the exchange rate was depreciated sharply in real terms, and substantial efforts were made to liberalize trade and privatize the public sector enterprises (see box on structural adjustment). These efforts, aided by a marked increase in oil prices, led to a sizable improvement in the balance of payments, allowing Mexico to enjoy a period of moderate economic growth in 1987.

The price-wage pact of 1988

The strong improvement in the external position of Mexico in 1986–87 was accompanied, however, by a marked deterioration in price performance, with the 12-month rate of inflation accelerating from under 65 percent in December 1985 to 160 percent in December 1987. Nominal interest rates were correspondingly high, which put additional pressure on the borrowing requirement of the public sector. The inflationary spiral, which was aggravated by the increased frequency of wage and official price adjustments, together with the crash in the Mexican stock market in October 1987, resulted in significant

The process of structural reform

Mexico has undertaken structural adjustment measures to open its external trade system, rationalize public sector enterprises, make the tax system more efficient, liberalize and privatize its financial system, ease restrictions on foreign investment, and deregulate specific economic activities. These reforms are helping to increase economic efficiency and are paving the way for medium-term growth.

Opening of the trade system. Since mid-1985, Mexico has opened up its economy through an extensive trade reform. Trade liberalization has reduced the coverage of import licensing to less than one fourth of the imports that were covered in mid-1985. Maximum import tariffs were reduced, in several stages, to 20 percent by December 1987, while the minimum tariff for most items was set at about 10 percent, making the levels of effective protection more uniform. To increase the credibility of its domestic efforts, Mexico joined the General Agreement on Tariffs and Trade (GATT) in 1986.

Divestiture of public sector enterprises. The authorities have cut the number of state-owned entities from over 1,100 in 1982 to about 350 by end-March 1990 through a process of mergers, liquidation, and sales. More significantly, the recent divestiture has targeted some of the biggest enterprises in the public sector. Further, in May 1990 a bill was submitted to the Mexican Congress to allow for the reprivatization of commercial banks expropriated in 1982. The divestiture policy has allowed the public sector to concentrate its limited resources on priority sectors and has allowed the private sector to participate in the development of critical areas of the economy.

Tax reform. In 1987, the authorities implemented a major reform of the tax system with a view to correct distortions (especially the effects of inflation) and to enhance Mexico's external competitiveness by harmonizing the domestic tax system with those abroad. The reform was accelerated in 1989–90 by significantly widening the tax base and reducing marginal tax rates. In particular, the Government introduced a new minimum tax of 2 percent on firms' assets; abolished tax exemptions granted to certain sectors of the economy; reduced the corporate tax rate from about 40 to 36 percent, while changing the system of taxing corporate dividends to discourage tax evasion and encourage reinvestment of profits; and lowered the tax rate on the highest personal income bracket to 35 percent.

Financial liberalization. To encourage financial savings and improve the allocation of credit, the Government, in March 1989, eliminated controls on interest rates and maturities for most traditional bank instruments. Further, the former system of mandatory lending from banks to the public sector through reserve requirements was replaced by a simplified system of liquidity requirements, and the role of open-market operations for monetary control was enhanced. In addition, interest rate subsidies implicit in some loans by national development banks were reduced. Also, in late 1989, legislation was passed that strengthened supervisory powers of the Bank of Mexico over the banking system.

Liberalization of foreign direct investment. Over the medium term, the Government expects foreign direct investment to play an important role in promoting growth. It announced a substantial liberalization of foreign investment regulations in May 1989; foreign investors may now own 100 percent of enterprises valued up to $100 million, without prior approval from the National Foreign Investment Commission, provided that certain conditions on location and net foreign exchange needs are met. The new regulations permit foreigners to invest in the Mexican stock market through specially designed Trust Funds.

Deregulation of economic activities. Complementing the measures mentioned above, the authorities have taken steps to deregulate specific sectors, particularly in the areas of transportation, communication, petrochemicals, and fisheries.

capital outflows late in that year. In response, the Bank of Mexico withdrew its support of the exchange rate in the free market causing the peso to depreciate sharply.

In mid-December 1987, the Government responded by further strengthening financial and structural policies and by incorporating a new element in its policy package—an incomes policy based on a social pact among business, labor, and government. The agreement called for strict fiscal and monetary policies and accelerated reforms of the trade and financial systems. Moreover, after initial adjustments, a generalized freeze through end-1988 was placed on wages and prices of a wide range of goods and services, as well as on the exchange rate (after a small adjustment in February) for the US dollar. These measures dramatically reduced the 12-month rate of inflation from 160 percent at the end of 1987 to 52 percent at the end of 1988.

The decline in inflation during 1988, however, was not accompanied by an equivalent decline in nominal interest rates, reflecting, in part, private sector uncertainty concerning the sustainability of economic policies. Moreover, real GDP grew by only 1 percent, while a sharp rise in imports, a decline in official borrowing, and substantial early repayment of debt by the private sector led to a worsening in the overall balance of payments, which recorded a deficit of almost $7 billion.

Against this background, a new administration under President Carlos Salinas de Gortari introduced a more comprehensive strategy in December 1988 to overcome the country's remaining economic problems, including the achievement of a medium-term solution to Mexico's debt problem.

The 1989–92 program

The objective of the authorities' program was to seek economic growth over the medium term consistent with price stability and a sustainable balance of payments. The economic recovery was to be led by growth in private sector investment, financed through increased private and public sector savings. To achieve these goals, the authorities felt that it was essential to tackle the external financing constraint by reducing the external debt burden. They announced their intention to seek a multiyear financing package from the country's creditors, which would substantially reduce the transfer of resources abroad, along with a comprehensive debt reduction program to be agreed upon with the commercial banks.

Domestic measures. The authorities' domestic policies were centered on a further fiscal correction, supported by a tight monetary stance to reduce inflationary pressures. Complementing the macroeconomic policies, the authorities announced measures to deepen further the process of structural reform of the economy.

To achieve its economic objectives, the new Government negotiated an extension of the wage-price pact through the end of July 1989, which was subsequently extended through January 1991, in order to consolidate the gains on the inflation front, while the Government negotiated with the country's creditors in a stable environment. To protect external competitiveness of the wage-price pact, the peso was initially depreciated daily by Mex$1 per US dollar (at an average annual rate of 15 percent) and subsequently, by Mex $0.80 per US dollar (at an average annual rate of 10 percent). Further, minimum wages and public sector prices and tariffs were adjusted periodically, in line with the objectives of the economic program.

International efforts. The authorities also sought the backing of the international financial community and official donors for their economic program. The Fund approved a three-year extended arrangement with Mexico on May 26, 1989, for the amount of SDR 2.8 billion (equivalent to about $3.6 billion). The amount of the arrangement was subsequently augmented by SDR 466 million (about $600 million) to provide support for debt and debt-service reduction operations, while SDR 0.8 billion of the initial access under the arrangement was set aside for this purpose.

Shortly after the approval of the Fund arrangement, the Paris Club creditors agreed to reschedule $2.6 billion of Mexico's debt-service obligations on official debt falling due in the next three years. Concurrently, Mexico concluded negotiations with the World Bank on several sectoral loans to support structural reforms in trade, financial, and fiscal sectors. In June 1989, the Bank approved sectoral loans to Mexico amounting to almost $2 billion (of which $760 million was earmarked for debt and debt-service reduction operations) and agreed to provide additional loans averaging $2 billion during the subsequent three years. In January 1990, the Bank approved an additional $1.26 billion for financing debt and debt-service operations.

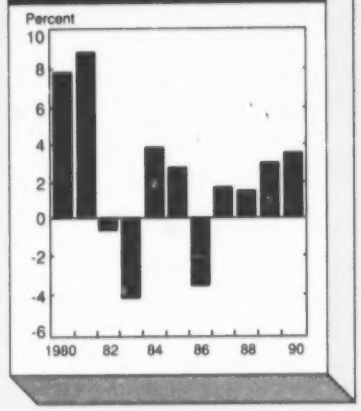
In support of its growth-oriented adjustment program, the authorities pressed for a multiyear financing package with commercial banks, which would involve debt and debt-service reduction operations sufficient to

Mexico: selected economic indicators

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
					(In percent of GDP)					
Public sector borrowing requirement	7.3	13.8	17.7	9.4	8.4	9.5	15.6	15.9	12.9	5.9
Gross domestic investment	27.2	27.4	22.9	20.8	19.9	21.2	18.1	19.8	20.9	22.4
Gross national savings	23.2	21.8	19.2	24.3	22.3	21.6	17.2	21.4	18.2	18.2
External current account	–4.0	–5.6	–3.7	3.6	2.4	0.4	–0.9	2.8	–1.6	–2.7
					(In billions of US dollars)					
External debt	51.4	75.0	89.6	93.0	94.0	94.8	98.5	107.5	100.9	95.3
Overall balance of payments	1.0	1.2	–6.8	5.5	3.0	–3.4	–1.2	6.6	–6.9	–1.0

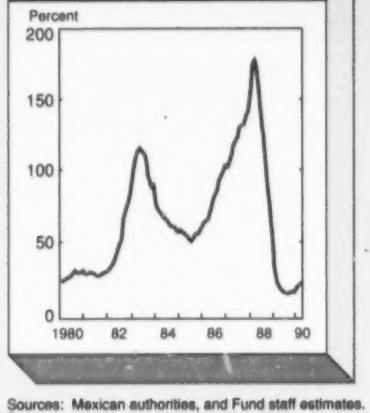
Source: Mexican authorities, and Fund staff estimates.

Chart 1
Mexico: real GDP growth, 1980-90



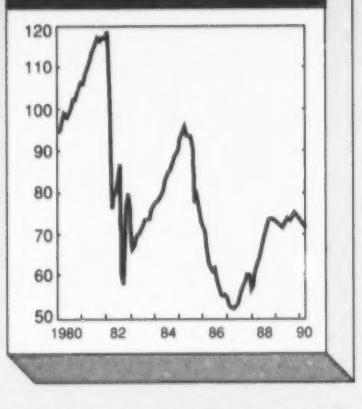
Source: Mexican authorities.

Chart 2
Changes in the consumer price index, 1980-90[1]



Sources: Mexican authorities, and Fund staff estimates.
[1]Change over the same month of the previous year.

Chart 3
The real effective exchange rate
(Base 1980=100)



Sources: Mexican authorities, and Fund staff estimates.

produce a substantial decline in the country's external debt. The strategy received a boost in March 1989, when the US Secretary of the Treasury announced the support of market-based and voluntary debt and debt-service reduction programs for the most heavily indebted developing countries. Negotiations were initiated with the commercial banks in April 1989, and an agreement in principle was reached on July 23, 1989.

Heartening results

The results to date of the authorities' efforts have been encouraging (see table and charts). Real GDP grew by almost 3 percent in 1989, with indications of a similar growth rate for 1990. Correspondingly, private investment grew markedly in 1989, reflecting increased domestic savings and the inflow of private foreign capital. Inflation was reduced to less than 20 percent during 1989, and a further reduction is expected in the medium term. Fiscal performance was strong in 1989, with the overall deficit declining in one year from 13 to 6 percent of GDP. Mexico's overall balance of payments deficit in 1989 amounted to $1 billion, after a deficit of almost $7 billion in 1988. Domestic interest rates have remained high in real terms, but have declined substantially since mid-1989, following the announcement of the financial package with commercial banks.

The wide range of structural reforms, aimed primarily at improving the microeconomic environment, have led, in conjunction with strong macroeconomic policies to a rebound in private sector activity, particularly investment, reflecting improved private sector confidence. In particular, financial savings have risen sharply following the financial liberalization, while the public finances have improved because of tax reform, expenditure control, and divestiture of public enterprises. Moreover, the revisions in foreign investment regulations, the intended privatization of domestic commercial banks, and the deregulation of economic activity have attracted significant amounts of private foreign investment and repatriation of private capital from abroad.

Conclusion

Mexico's performance clearly shows the need to maintain strong and consistent macroeconomic policies, which should be adapted quickly in the face of unexpected shocks. Moreover, the persistence for much of the period since 1982 of low or negative economic growth and inflationary pressures underscores the importance of complementing financial policies with prudent incomes policies, significant structural adjustment measures, and external financial support.

The 1989–92 economic program is a comprehensive one. The authorities have implemented particularly strong fiscal and monetary policies, as evidenced by the impressive fiscal adjustment since 1982, equivalent to over 12 percentage points of GDP. Further, the use of an incomes policy, in combination with the consistent application of financial policies, has helped break the inertial element of inflation in a manner that has averted heavy social and economic costs. More recently, to avoid the emergence of relative price distortions, the authorities have been gradually reducing the scope of wage and price controls. The liberalization of the financial system and regulations concerning direct investment have complemented other structural economic reforms. The improvement in price performance and reduction in financial imbalances in recent years has set the stage for a recovery in economic activity and helped release resources for private sector investment.

The authorities' reform efforts, accompanied by external assistance—including wide-ranging debt and debt-service reduction—have substantially improved the prospects for Mexico's return to satisfactory growth. The attainment of the Mexican authorities' medium-term goal, however, rests upon the continued implementation of sound financial and structural policies. ■

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Mexico's Commercial Bank Financing Package

An important breakthrough in debt reduction and financing operations in support of Mexico's growth-oriented adjustment program

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After a year of intensive negotiations, Mexico reached an agreement with its international commercial bank creditors on the most complex financing package to date. The agreement, signed on February 4, 1990, is the first comprehensive debt relief package under the strengthened debt strategy, with Bank and Fund resources being made available to finance debt and debt-service reduction operations with commercial banks.

The commercial bank package is a particularly important element of the country's multiyear financing plan for its medium-term growth-oriented economic program supported by an arrangement under the Fund's extended Fund facility and by World Bank project and sector loans (see box). The economic program involves important structural reform measures in the areas of production, trade, and financial services, accompanied by the sustained implementation of prudent fiscal, monetary, and pricing policies. The financing package covers eligible debt of some $48 billion of Mexico's estimated total external indebtedness of $95 billion at end-1989. In addition to rescheduling principal obligations falling due and securing new loan commitments for the period ending 1992, the package extinguishes a portion of Mexico's outstanding debt and reduces the contractual interest rate on a second portion. Accordingly, Mexico has been able to lower its debt-servicing obligations while, at the same time, improving in a sustainable manner, the structure of its external indebtedness. If Mexico manages to sustain the implementation of sound economic policies, the financing package will play an important role in fostering private sector investment activities, encouraging greater inflows of nondebt-creating foreign financing, and promoting higher economic growth.

Structure of the financing package

Mexico formally initiated negotiations on its multiyear financing package in April 1989. Preliminary agreement on the broad elements of the financing package was reached on July 23 with the advisory committee of commercial banks (consisting of representatives of 13 creditor banks). The key terms of the financing agreement were finalized on September 13; the agreement was subsequently "marketed" to Mexico's bank creditors (around 500 banks), and signed on February 4, 1990, once almost all eligible claim holders had agreed to participate. The exchange of financial instruments between Mexico and its commercial creditors then took place on March 29, 1990.

Under the terms of the package, banks holding eligible claims on Mexico were to choose from one of three financing options:

- an exchange of claims for 30-year discount bonds (at 65 percent of face value) carrying a market interest rate (at a spread of 13/16 percent over LIBOR), full guarantee of principal to be paid back in one installment after 30 years, with 18 months guarantee on interest;
- conversion of claims into 30-year par bonds with below-market fixed interest rates (6.25 percent) and the same maturity and guarantee structure as for the discount bonds; and
- provision of net "new money" (i.e., new loan facilities) for 1989–92 amounting to 25 percent of eligible claims, repayable over 15 years, including 7 years' grace.

The financing package incorporates a new debt-equity program, which replaces that suspended in 1988. Under the program, holders of restructured claims can convert their assets into equity participation in privatized enterprises and infrastructural investments. The program allows for conversions of $3.5 billion of eligible debt (original face value). The financing package also includes a "value recovery clause" that enables banks to receive higher payments from Mexico if, starting in 1996, oil prices exceed the threshold level of $14 a barrel after adjusting for inflation. Such payments would amount to 30 percent of "windfall" oil revenue, subject to an annual limit equal to 3 percent of the banks' eligible claims at the time the agreement was signed. Finally, by incorporating waivers to certain key payment clauses, the package allows Mexico to conduct additional market-based debt and debt-service reduction operations in the future.

Collaterals for the package

Consistent with the terms of the financing package, Mexico took steps to provide commercial bank creditors with "enhancements" in the form of payments guarantees for all principal obligations on the converted bonds, as well as a rolling guarantee for part of the interest stream. Mexico purchased 30-year US Treasury zero coupon bonds (i.e., discounted bonds that pay no interest) to cover the principal to be paid on the bonds, and established an interest collateralization account at the Federal Reserve Bank of New York for an amount equivalent to the present value of 18 months of interest obligations. These enhancements would accrue back to Mexico should it meet all contractual payments on the bonds, or retire them prior to the contractual maturity date.

In total, some $7 billion was required for enhancing the debt exchanges. This was met through resources committed by the IMF (SDR 1.3 billion, equivalent to some $1.7 billion), the World Bank ($2 billion), and financing in connection with import facilities from the Export-Import Bank of Japan ($2.0 billion). The residual was funded from Mexico's own reserves. As a portion of the resources from the Fund and Japan are to be released in installments over 1990–92, a commercial bank facility of $1.2 billion was put in place to bridge to the later disbursements of official assistance.

Direct impact of package

The financing package provides cash flow relief to Mexico in the form of new money disbursements, a rescheduling of principal obligations, and interest relief resulting from the reduction in contractual interest rates and the elimination of principal.

Banks holding $20.4 billion of eligible claims selected to exchange their claims for discount bonds, while those holding $22.7 billion chose the par bond option. Consequently, debt with face value of $7 billion was extinguished. In addition, the contractual interest rate on $23 billion of debt was reduced to a below-market fixed rate; this implies, at prevailing interest rates, the equivalent of an additional elimination of $8 billion of debt. New money commitments amounted to over $1 billion, with the first disbursements totaling $0.5 billion made in March-April 1990.

The debt and debt-service reduction operations result in an effective reduction of indebtedness to commercial banks of $15 billion—equivalent to some 16 percent of Mexico's total external liabilities. This is partially offset by obligations to official creditors of $5.7 billion incurred to finance the debt exchanges. Consequently, the immediate effect of the package is to effectively reduce Mexico's total external indebtedness by some 10 percent. The principal obligations on a substantial portion of the remaining debt may be regarded as effectively prepaid by the recent purchases of the zero coupon bonds.

Mexico will improve its cash flow immediately by reducing its contractual interest obligations for the period ending 1992 by some $4 billion, after taking account of net interest payments on the resources borrowed to purchase the guarantees. In addition, principal obligations of $8 billion would be effectively rescheduled. The beneficial cash flow effect of the package will increase over time as a result of lower interest payments that Mexico would have to make and consequently the lower financing requirement to be covered by new loans.

Other effects of the package

In addition to reducing debt-servicing obligations, the agreement contributes to Mexico's balance of payments through its positive impact on perceptions of country risk. As Mexico's indebtedness rose, concerns had mounted among domestic and foreign investors regarding the authorities' ability to meet scheduled payments without, inter alia, substantial increases in effective taxation. This was reflected in relatively high real rates of interest internally as borrowers needed to compensate savers for the increased risk premia. At the same time, the discount on Mexican external claims traded on the secondary market for developing country debt increased to over 60 percent. These factors, and the associated erosion of investor confidence in the outlook for the Mexican economy due to the debt "overhang," adversely affected productive activities and the country's progress toward sustained medium-term growth.

The recent debt and debt-service reduction operations, implemented in the context of strong economic and financial adjustment policies, are expected to reduce the debt overhang, thereby helping to achieve higher investment and growth. In effect, the lower contractual obligations resulting from the elimination of part of the external debt and below-market fixed interest rates reduce the risk premia on real investment. Consistent with this view, the announcement of a preliminary agreement on Mexico's financing package in July 1989 was followed by a substantial reduction in domestic interest rates (by over 20 percent to an annualized nominal rate of 33 percent). Balance of payments developments were characterized by large inflows of private capital, including foreign direct investment and the repatriation of capital flight. While subsequent monetary developments led to a partial reversal of the decline in interest rates, domestic rates have responded favorably to the finalization of the bank package and the intensification of structural reform and demand containment measures. As a result, rates are substantially lower than at the time of the initial agreement on the package, private capital inflows have intensified, and there are indications of a gradual restoration of Mexico's access to spontaneous credits from international bond markets.

The beneficial impact of the financing package has been accentuated by policy actions to attract nondebt-creating flows. Thus, Mexico has modified its investment regulations so as to increase foreign direct investment. It has also taken steps to facilitate foreign portfolio investment in domestic securities markets, including investment related to privatization efforts. At the same time, repatriation of foreign capital has been encouraged by the adoption of tight monetary policies and financial system reforms that have led to the emergence of competitive yields on domestic assets and increased confidence in the economy's prospects.

Conclusion

Mexico's agreement with commercial banks is important not only for the country, but also has implications for the orderly resolution of the debt problems facing a number of other developing countries. By encompassing large-scale debt and debt-service reduction operations, Mexico's commercial bank financing package constitutes an important step in the implementation of the strengthened debt strategy, which seeks to facilitate debtor countries' return to sustained economic growth and external payments viability.

The agreement—which supports a comprehensive economic adjustment package with a strong structural reform component—provides direct benefits for Mexico's external position in the form of lower payment obligations to commercial creditors and reduced vulnerability to fluctuations in international interest rates. These effects are compounded by indirect benefits that include improved private sector confidence and therefore better prospects for higher investment financed by the return of flight capital and inflows of other forms of nondebt-creating capital. Accordingly, if accompanied by the sustained implementation of sound economic and financial policies, and in the absence of major adverse exogenous shocks, the financing agreement facilitates substantially Mexico's return to sustained economic growth and financial stability. ■

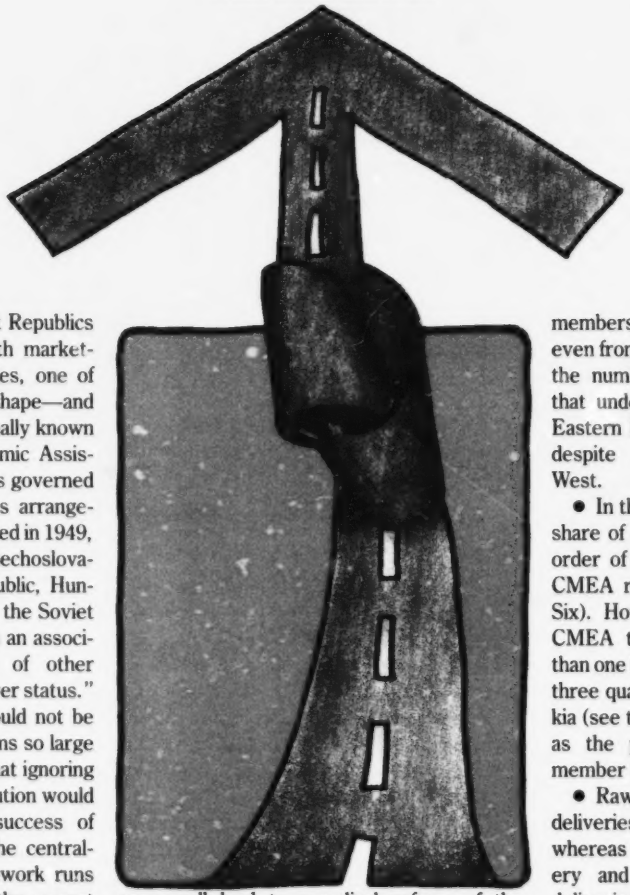
Fund and Bank support for debt and debt-service reduction

In May 1989, the Executive Boards of the Fund and Bank approved the provision of financial assistance to member countries to finance debt and debt-service reduction operations with commercial banks. The guidelines for access to such assistance specify, inter alia, that: operations be in support of strong economic policies; that they be voluntary, market-based, and help the member country regain access to credit markets and attain external viability; and that they represent an efficient use of resources. In the case of the Fund, the guidelines allow for "set-asides" to finance principal reduction and "augmentation" to be used for interest support in connection with debt and debt-service reduction operations. The exact size of the set-asides is determined on a case-by-case basis, and involves around 25 percent of access under the underlying arrangement. Augmentation resources are subject to a limit of 40 percent of the member's quota. As of end-June 1990, assistance had been approved for Argentina, Costa Rica, Ecuador, Mexico, the Philippines, and Venezuela; disbursements had been made for Mexico and the Philippines.

Whither Comecon?

Centrally planned economies slowly tackle reform of their mutual trade and payments arrangements

Martin Schrenk



As the Union of Soviet Socialist Republics and Eastern Europe struggle with market-oriented reform of their economies, one of the major unresolved issues is the shape—and indeed, future—of Comecon, formally known as the Council for Mutual Economic Assistance (CMEA). This institution has governed their regional trade and payments arrangements for the past 40 years. Founded in 1949, it now includes Bulgaria, Cuba, Czechoslovakia, the German Democratic Republic, Hungary, Mongolia, Poland, Romania, the Soviet Union, and Vietnam. Yugoslavia is an associate member, while a number of other countries maintain a looser "observer status."

The urgency of the matter should not be underestimated. Mutual trade looms so large in the total trade of all members that ignoring the need for redesigning the institution would pose a serious threat to the success of economic reforms. In addition, the centralized nature of the existing framework runs counter to the very thrust of the recent moves for systemic reforms. Not surprisingly, therefore, reformers in Eastern Europe and the Soviet Union recently rejected the traditional CMEA-regime. In January 1990, at a meeting of the CMEA Council in Bulgaria, they took the first steps toward reforming the institution, setting in motion a process that may well lead to a radical reform of the CMEA, if not its demise. The present state of indeterminancy thus offers unique opportunities for crafting a new framework. But it also raises considerable risks unless the costs and benefits of the options are carefully weighed.

This article is based on "The CMEA System of Trade and Payments: Today and Tomorrow," by the author, SPR Discussion Paper No. 5 (January 1990). Copies are available from the Bank's Country Economics Department, Socialist Economies Reform Unit, 1818 H Street NW, Washington, DC 20433 USA.

Importance of trade patterns

Trying to get a clear picture of the trade flows between the Soviet Union and the Eastern European CMEA members (known as the Six) is a frustrating exercise, due to divergent, and in part, diffuse statistical conventions of coverage, pricing, and currency conversion. Strict comparability of data is impeded, both for trade between CMEA members and with the rest of the world, and even from one year to the next. Nonetheless, the numbers suggest orders of magnitude that underscore the need for reformers in Eastern European nations to still look East, despite temptations to increasingly look West.

- In the mid-1980s, for example, CMEA's share of total world exports was only in the order of 8 percent (throughout this article, CMEA refers to the Soviet Union and the Six). However, the concentration on intra-CMEA trade ranged from something less than one half for Hungary and Poland to nearly three quarters for Bulgaria and Czechoslovakia (see table), with the Soviet Union ranking as the principal trade partner for every member of the Six.
- Raw materials and fuels dominate the deliveries of the Soviet Union to the Six, whereas manufactures (particularly machinery and consumer goods) dominate the deliveries of the Six to the Soviet Union.

How CMEA operates

Trade among the various CMEA members has traditionally been governed by a complex set of rules that have evolved since the late 1940s. They are unlike those of any of the familiar concepts of regional economic integration, such as customs unions, free trade areas, or common markets.

Bilateral clearing. In essence, the CMEA is a common set of rules for planning and implementing bilateral trade agreements, as well as settling bilateral transaction accounts. Bilateral trade is further broken down into a number of sub-balances that must be cleared independently of one another, in

order to integrate trade into production planning and reflect the varying degree of competitiveness of the traded goods in Western markets. A surplus in one subbalance cannot be used to settle a deficit in another. Similarly, surpluses with one country cannot be used to settle deficits with others. As a result, the CMEA's common accounting currency—the "transferable ruble"—lacks both currency convertibility and "commodity convertibility," along with other functions normally associated with money.

This rigid framework means that governments must plan the size and composition of mutual trade in great detail, closely monitoring actual activity to minimize the accumulation of unplanned imbalances. Actual transactions are recorded and cleared through clearing accounts held with the International Bank for Economic Cooperation (IBEC) in Moscow, a subsidiary organ of the CMEA. As with any clearing system, currency reserves are not required.

Prices. Agreement on prices is explicitly or implicitly included in the bilateral treaties. The "Bucharest formula"—a 5-year moving average of world market prices, converted through the official CMEA exchange rate into transferable rubles—serves as the basis for determining transfer prices. This formula, however, generates unambiguous reference prices only for publicly quoted basic commodities. For manufactures, however, product specifications rarely match, and, more often than not, "external" price information is either arbitrary, of poor quality, or outdated. The pricing rule thus operates essentially as a starting position for bilateral haggling, with agreed transfer prices often differing substantially both from the reference basis and between pairs of countries.

One of the main problems with this trading system is that domestic relative prices in one country—determined largely by distributional or political considerations rather than market forces—interact with very different sets of relative prices in other CMEA countries, as well as the competitive world market. The potential for large profits and losses resulting from noneconomic differences between relative price systems are neutralized through a "price equalization" mechanism, which may deploy a variety of means (such as taxes and subsidies, differential exchange rates, etc.). In effect, this diverts all differences between domestic and converted border prices into the budget.

Macro-balances and exchange rates. Under traditional central planning, from which the CMEA regime has been derived, the external balance is maintained by governments controlling all transactions at the micro level. Concern for ex post balances is reinforced by the fact that unplanned surpluses are highly undesirable for the creditor country, because the lack of currency or commodity convertibility turns them into involuntary trade credits. The main instruments of control, therefore, are export and import quotas and licenses, often down to the level of the firm. In this framework, the exchange rate does not—and is not supposed to—provide a market signal.

Impact of CMEA rules

One of the most serious short-term problems with the existing CMEA regime has been the impossibility of assessing gains from trade. Indeed, a long-running controversy among Western analysts, as well as among trade negotiators of the CMEA countries, concerns the estimation of net gains and losses. The prevailing view is that over the last two decades the terms of trade have on balance been highly unfavorable for the Soviet Union—an outcome that is often interpreted as a "hidden subsidy." This has resulted in part from the commodity pattern of trade, which shows the Soviet Union selling mostly "hard" (easily exportable to the rest of the world) raw materials, including hydrocarbons, in exchange for mostly "soft" (essentially uncompetitive by international standards) manufactures. In addition, raw materials have tended to be "underpriced," while manufactures have tended to be "overpriced."

These short-term gains for the Six, however, have exacerbated distortions of the price structures, fostering delusions of cost competitiveness. Indeed, this has been a major force behind the growing structural problems in a dynamic perspective. Bilateral treaties implemented under tight government control have created supply monopolies—especially if specialization agreements assign production to one of the countries—and product development has been discouraged when new and superior products disturbed the agreed balances. In the end, the export industries have been locked into an uneconomic output structure, and outmoded product and process technologies, which have increasingly made them uncompetitive by world market standards. As a result, the Six now face severe supply constraints when it comes to exporting to the world market, and, making matters worse, there is a lack of export marketing know-how and infrastructure.

Together, these physical, technological, and institutional constraints have created a high degree of "structural dependency" of

Trade flows for the CMEA (1988)
(Percent of total exports and imports)

	Exports					Imports				
	Six[1]	USSR	Developed market economies	LDCs	Rest[2]	Six	USSR	Developed market economies	LDCs	Rest
Bulgaria	18.1	62.8	6.4	9.1	3.6	20.1	53.7	15.5	7.8	2.9
Czechoslovakia	29.9	43.1	16.3	4.7	6.0	32.3	40.3	18.6	3.5	5.3
German Dem. Rep.	26.1	34.8	29.9	3.6	5.6	25.3	36.8	31.8	2.7	3.4
Hungary	17.0	27.6	39.5	9.9	6.0	18.7	25.0	43.3	7.7	5.3
Poland	16.2	24.5	43.3	10.2	5.8	17.2	23.4	45.7	7.1	6.6
Romania	16.8	24.0	33.7	19.0	6.5	24.6	24.0	13.5	18.8	19.1
USSR	48.9	...	21.9	14.2	15.0	54.1	...	25.1	8.2	12.6

Sources: Based on official statistical yearbooks of the reporting countries and UN estimates.
[1]Six: Bulgaria, Czechoslovakia, German Democratic Republic, Hungary, Poland, and Romania.
[2]Rest: Rest of the world (predominantly Yugoslavia and China).

large segments of industry, the main export sector for the Six. In the view of most observers, this dependency is so severe that it could not possibly be rectified overnight, constraining their reform options for years to come.

Options for the future

At this stage, a comprehensive blueprint for the future shape of the CMEA has yet to emerge. However, a number of changes are being discussed, all of which could become elements of a revised CMEA framework, including complete autonomy of producing and receiving firms to conclude commercial contracts on volumes and prices; the introduction and gradual extension of limited convertibility; an increased use of convertible currency as a unit of account and for settling aggregate (inter-country) balances; and the creation of a limited equilibrium exchange rate through the auctioning of foreign exchange earned by exporting firms. But actual and proposed changes are frequently difficult to distinguish, dates of introduction of announced changes are often unclear, and some proposals are evidently "trial balloons" or negotiating devices. Nonetheless, it is possible to identify a number of conceivable configurations and evaluate their likelihood.

Unchanged CMEA. The continued operation of an unchanged CMEA, with each member maintaining its current level of intra-CMEA trade, is receding quickly as a plausible outcome. The status quo has been rejected by all reforming countries, including the Soviet Union, because of efficiency considerations and the realization that the traditional CMEA regime is not only alien to a reformed economic system but could threaten the progress of system reform. Virtually the only set of circumstances under which this possibility could emerge would be a collapse of reform efforts in most CMEA countries, accompanied by a reversal of the opening of these economies to the world market.

"Free trade" regime. Prompt and complete integration into a multilateral trading system with full currency convertibility would bring the embedded distortions and structural dependencies immediately to the surface. The immediate effect would be to reduce CMEA trade to the small fraction that is currently traded in freely convertible currency. The resulting trade contraction would make it an unrealistic option for all of the Six, as they would need to quickly find a way to replace the CMEA sources of imports with alternative ones in the convertible currency area. Their structural supply constraints make a diversion of exports to competitive convertible currency markets impossible in the short run. The alternative—increased borrowing in convertible currency to finance the import of current inputs from other sources—would also not be possible, given the amounts involved, existing debt burdens, borrowing requirements for modernization, and time necessary for effective restructuring. Free trade thus can at best serve as the goal at the end of a long-term process of systemic and structural change.

Furthermore, even if an immediate transition to free trade—associated with a radical contraction of CMEA transactions—were economically feasible, it might not be desirable. There are presumably plenty of instances in which long established exports to the Soviet Union are in line with comparative advantage; the problem is rather that under the present CMEA rules and practices they remain concealed. More important, by effectively terminating most exports of manufactures from the Six to the Soviet Union, the existing trading links would be severed. This amputation could cripple the economies of the Six. If and when they have to start competing with newcomers in the market of the Soviet Union, their established trading links may be their most precious competitive edge.

Radically reformed CMEA. The creation of a radically altered multilateral CMEA, along the lines suggested by some reformers—essentially economic integration into a "common market" comparable to what is expected for the post-1992 European Community—is unlikely to be politically feasible. The long history of acrimonious conflicts within the CMEA, and its record of inability to arrive at a consensus on common programs of actions, do not support the assumption that political management of the CMEA would be any easier in the future. It is difficult to imagine how an effective integration program can be agreed upon and carried out on the basis of a unanimous decision of all members, as required by the CMEA statutes. And it is equally difficult to imagine a transition to a universally acceptable majority voting rule, given the vastly diverse economic weight of the members. The fact that a radically reformed CMEA would necessitate all countries moving "in step" on unfamiliar, complex issues, such as a measure of coordination of macroeconomic management and development of a common external trade policy, makes a sufficient rate of progress exceedingly implausible.

Reformed bilateralism. This seems to narrow the range of options to some form of reformed bilateralism, which would amount to a refined bilateral framework for trade and payments between pairs of countries, covering rules and procedures on which the two could agree. It would also capture the growing practice of denominating some bilateral transactions in convertible currency but short of settlement of claims through unrestricted currency transfer. In principle, it would be a transitional framework that would aim at a gradual movement toward a free trade regime. The pace of transition and the share of trade covered under each agreement could be determined by the parties involved. Similarly, the relative size of trade covered by each agreement could be changed over time by mutual agreement—perhaps gradually scaling down from 100 percent to zero. Ultimately the rationale for—and the ultimate scope of—mutual relations would shift from structural dependency to evident mutual gain, and if such a regime ever did fully take hold, it would constitute a de facto demise of the CMEA as we now know it.

"Small CMEA." Recently, the creation of a new regional trade and payments framework has been suggested for those countries among the Six that are opting for a similar trajectory of system reform. The institutional framework would be equivalent to an extension of the concept of reformed bilateralism to more than two countries. Advocates point to the analogy of the gradual opening of the post-war trade and payments system of Western Europe within the framework of the European Payments Union. The members of the EPU entered the transition process in 1950 virtually without currency reserves and with national regimes of narrow bilateralism lacking convertibility. But by 1958, when the EPU ceased to operate, they emerged with a multilateral regime with full convertibility and sufficient currency reserves. The two cases are indeed similar in many important respects. However, they differ in one critical area—the institutional conditions that govern the behavior of firms—making the outcome less than clear.

Political context

An analysis of the economic gains and costs associated with each of the options is

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beyond the scope of this article, but one can point to some relevant political and economic constraints. While the thinking about viable options is still very much in flux, and while information on the positions of governments is extremely vague, it appears at this juncture that some form of "reformed bilateralism" is the most likely outcome—followed by the "small CMEA"—without a sharp dividing line between the two.

In the case of reformed bilateralism, the Soviet Union—given current trade flows and structural dependencies—would be the most important partner for every member of the Six. But as the Soviet Union can more easily divert the bulk of its exports to Western markets than can the Six, and as it does not depend on supplies from any single country among the Six, while each of the Six is highly dependent upon the Soviet Union, it seems to be in an inherently stronger bargaining position. Furthermore, as political detente chips away at the geopolitical rationale for the Soviet Union to maintain relations with the CMEA countries, it would be unrealistic to expect it to "pick up the bill" for resolving the structural problems of the Six—unless this were to its economic advantage as well.

Apart from these obvious drawbacks, a move toward reformed bilateralism offers at the same time economic opportunities for the Six. The challenge is to progressively throw out the elements of the current CMEA-regime that make it so inefficient and inflexible, transforming it into a more advantageous one for all participants. This would involve building on the existing know-how and trade with the Soviet Union to ensure continued market access for the industries in which they enjoy a comparative advantage in expertise, contacts, goodwill, and proximity. A major unknown at this juncture, however, is the direction and speed of further reform of the Soviet Union.

As for the economic and political viability of the "small CMEA" option, the restriction in membership could avoid the curse of the present CMEA mechanism—the impossibility of reaching a multilateral consensus on important matters. But the economic benefits of setting up a new institutional framework and supranational organization for such a limited arrangement are not immediately obvious for several reasons. First, it is difficult to imagine more than three compatible countries (ruling out any future role for the German Democratic Republic), as the volume of mutual trade between prospective members would not be enough to create a "critical mass." Second, several countries are already opening up their trade and payments system and may not see sufficient grounds to adopt restrictive rules for a section of their trade. Third, as bilateral relations with the Soviet Union would still continue, this option would amount to the introduction of a third trade and payment regime, creating additional rigidities and inefficiencies. Fourth, advocates see this serving as a "core" for subsequent inclusion of the Soviet Union, but such an extension could recreate the conditions for the conflicts that have often paralyzed the CMEA and mitigate the prospects for a "radically reformed CMEA."

In sum, the Eastern European countries not only face formidable political and analytical challenges but they also must contend with a unique—and often overlooked—set of challenges arising from the complex relations they have built up with one another over the past 40 years. ■

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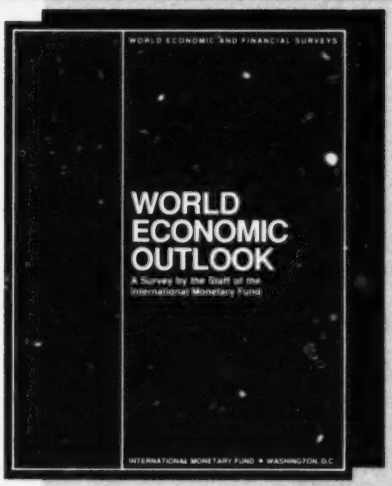
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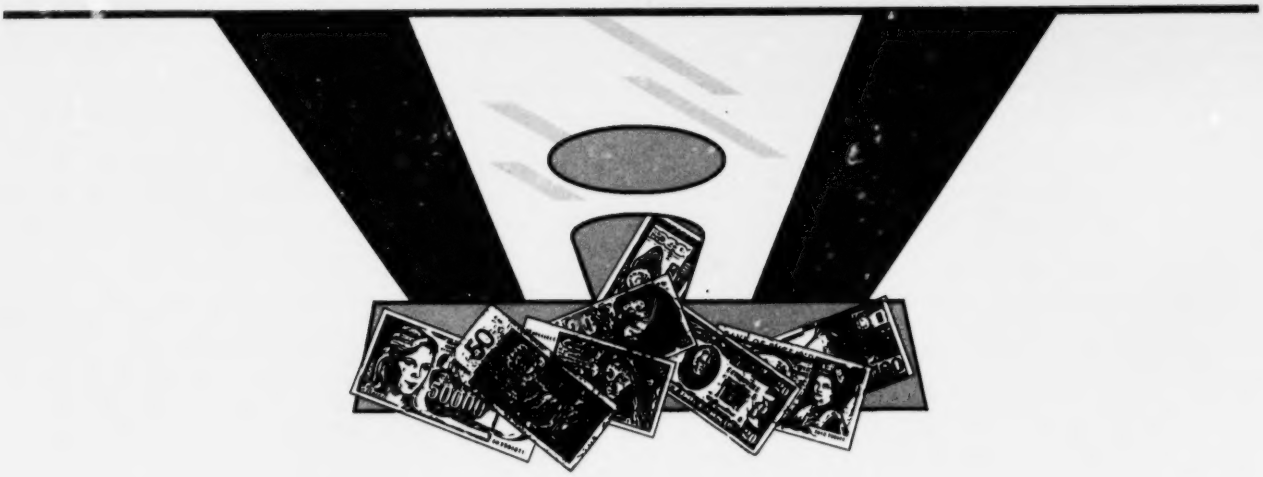


Heading for Currency Convertibility

As the current experience in Eastern Europe shows, sound macroeconomic policies are a crucial prerequisite

Martin G. Gilman

With the rapidly unfolding developments in Eastern Europe, there have been resurgent calls for moves toward currency convertibility—essentially, the unrestricted use of a country's currency for international transactions, allowing it to be freely exchanged for foreign currencies—as a part of the process of integration into the world market economy. The virtues of convertibility appear to be widely accepted: offering greater freedom of choice between foreign and domestic goods, services, and assets, when combined with the liberalization of those transactions; and enhancing efficiency through the elimination of price distortions. Less clear, however, is whether countries with previously highly protected economies equally accept the inevitable costs inherent in the wrenching adjustment entailed in moving toward greater currency convertibility. This has given rise to divergent views on the desirable pace toward convertibility. Some are opting for a gradual approach, while others, such as Poland and Yugoslavia, launched bold initiatives in early 1990.

To understand what is involved in the move to convertibility and why some countries opt for approaches that are faster than others, it is helpful to place the concept of convertibility in perspective. This article briefly recaps this background, highlighting the rules of the IMF on convertibility, before moving on to detail the necessary preconditions for the successful introduction and maintenance of convertibility. Finally, some observations concerning the convertibility of Eastern European currencies are presented, ones that pertain in varying degrees to policy dilemmas faced by economic decision makers in other regions. The main point that emerges is that if governments wish to avoid resorting to restrictions on the use of domestic currency for foreign transactions, then sound economic policies must be pursued.

The concept of convertibility

Convertibility—traditionally defined as the unrestricted exchange of paper money into gold at a predetermined rate—has long played a central role in international economic relations. Until 1914, the United Kingdom maintained full convertibility of sterling into gold at a fixed rate. But in 1925, and again, in 1947, it failed in its attempts to restore convertibility, not only to gold but also to the US dollar, because of high underlying rates of inflation and inappropriate supporting policies. It took until 1958 for the major Western European nations to re-establish currency convertibility—following the breakdown of

the world financial system between the two world wars and the move from a gold standard to a modified gold/dollar standard—although the financial discipline imposed by the convertibility requirements at pre-established par values eventually proved unacceptable to certain major industrial countries. In 1973, the par value system, which had been adopted with the founding of the IMF at Bretton Woods in 1944, collapsed, and the era of floating rates was ushered in. In theory, this should have allowed most countries to move toward full convertibility, since there would be no need to impose restrictions to support a particular exchange rate.

In practice, a large number of governments were not willing to give total freedom to their currencies' movements, preferring fixed exchange rates, or at least targets for the exchange value of their currencies. Many resorted to restrictions on trade and payments rather than monetary and fiscal discipline to support their exchange rate policies, correspondingly reducing the degree of convertibility of their currencies. As a result, even where tight government controls on currency convertibility existed, there was usually a parallel, and often illegal, market where currency could be exchanged at some price.

Currency convertibility is, in principle, a simple concept. It applies to the ability of residents and nonresidents to exchange domestic currency for foreign currency without limit. There are, however, many degrees of convertibility, with each denoting the extent to which governments impose limitations on the use of currency, which can take the form of prohibitions, taxes, special deposits, nominal ceilings (such as for travel allowances), or procedures for allocating foreign exchange. But even in cases where currencies are fully convertible, the practical scope depends not only on the extent of governmental limitations on foreign exchange and payments but also on restrictions applied to the underlying transactions, such as imports, services, or investing abroad. To free one without the other is to effectively limit the use of a given currency in a practical sense, by reducing the extent to which it can be used to carry out transactions and make purchases. Thus, convertibility—a financial concept—should be accompanied by liberalization of trade and other international transactions, implying that the benefits of full convertibility are derived from both "financial" and "commodity" convertibility.

The IMF—one of whose founding purposes was to seek a multilateral, nondiscriminatory system of payments and transfers for current international transactions, and to eliminate foreign exchange restrictions—accommodated the switch to floating exchange rates by incorporating them into the Second Amendment to its Articles of Agreement in 1978. This flexibility implied that there would no longer be any impediments, in principle, to the adoption of full convertibility of members' currencies.

The fundamental notion of convertibility fostered by the IMF is that countries should allow an unrestricted and nondiscriminatory right to residents to use domestic currency to effect payments and transfers for current international transactions. But it should be noted that the Fund's concept of convertibility, as defined in its Articles of Agreement (Article VIII), is a limited one, related pragmatically to the economic circumstances of members. Fund members are obliged to maintain financial convertibility (the absence of government limitations on the making of payments and transfers), but not commodity convertibility. Moreover, the Fund's concept applies only to current transactions (in a few instances, transactions of a capital nature are included, such as amortization of loans or depreciation of direct investments), and is limited mostly to relations with other Fund members. Deviations from the Fund's convertibility objectives are permitted, although members are expected to remove restrictions as soon as circumstances permit.

Preconditions to convertibility

Over the years, many countries have found that the twin goals of relative exchange rate stability and convertibility cannot be achieved simultaneously in an inflationary environment or where inflation is repressed via price controls and rationing. More precisely, if a country's price level rises faster than its trading partners—and abstracting from terms of trade, institutional, technological, and climatic changes—it cannot hope to maintain equilibrium in its balance of payments without either introducing ad hoc restrictions on imports or payments, or letting its currency depreciate; in other words, without abandoning either convertibility or the nominal stability of its currency. Clearly, within this trade-off (at least since the time of the Second Amendment), convertibility—accompanied by increasing trade liberalization—has been the more desirable objective. The goal of a stable system of exchange rates is to be achieved by the adoption of mutually consistent and appropriate macroeconomic policies.

In moving toward convertibility—while taking into account the size of the underlying macroeconomic imbalances and the degree of cost/price distortion in the economy—a country would need to establish certain preconditions if extreme fluctuations in its nominal exchange rate are to be avoided.

- ***Exchange rates must be realistic.*** Whatever type of exchange arrangement is put in place, the real exchange rate must be compatible with a sustainable balance of payments over the medium term—that is, relative prices must be roughly aligned. This will usually entail movement from an overvalued official exchange rate and a substantially more depreciated parallel market rate toward a unified, market-clearing nominal rate. This could involve, at least initially, floating the rate in an auction market through which an increasing proportion of external transactions (including those of the official sector) are channeled. The goal would be to narrow, and then eliminate, any difference with the parallel market rate. The maintenance of a realistic exchange rate (one that is perceived as being credible in terms of market expectations), is a *sine qua non* for the sustainable convertibility of a currency.

- ***Macroeconomic policies must be appropriate.*** At the same time, stable real exchange rates, whether in fixed or floating regimes, can only be maintained without recourse to restrictions when appropriate macroeconomic policies—essentially monetary and fiscal policies—are in place. Such policies would help restrain overall demand in line with a country's productive and debt-servicing capacities. Internal financial stability, in the form of relatively low inflation, is essential to the success of convertibility. A major burden will fall on monetary policies, especially where there has been suppressed inflation and thus excess liquidity in the system. Steps could also be taken to absorb excess liquidity directly through the large-scale sale by the state of tangible assets (e.g., housing, businesses) and financial assets.

- ***Price controls should be eliminated.*** In countries where resource allocation has been distorted through the use of price controls, the use of a market-clearing price for foreign exchange will facilitate the determination of appropriate domestic market prices in the nontradable sectors. The longer the domestic price structure has been distorted, and the greater the degree of distortion, the greater the transitional costs of adjustment; conversely, the greater the benefits in the removal of distortions. The heated nature of the current debate on the appropriate degree of gradualism in adjustment programs being implemented by countries under these conditions—along with the emphasis on the need for a social safety net to cushion the adverse impact of adjustment on the poor—stem from these considerations.

- ***Adequate foreign exchange reserves are needed.*** Substantial foreign

exchange reserves or external credit lines may be necessary to bolster market credibility in an initial period of adjustment, if convertibility is to be introduced while maintaining a particular nominal exchange rate, or within a specified range. Balance of payments support may also be needed in subsequent periods of external pressure. For members of the IMF, use of Fund resources could be temporarily made available for this purpose.

The removal or reduction of the above obstacles should permit a country's authorities to move toward currency convertibility by eliminating various restrictions on payments and transfers—including the use of bilateral payments agreements, import deposits, and export subsidies. Moreover, liberalization of the underlying transactions, beginning with trade and services, should be pursued. Any remaining trade and payments restrictions in the transitional period should be included in "negative lists," meaning that anything not explicitly restricted is permitted.

Partner countries should reciprocate these efforts by opening up their trade and payments systems, if they have not already done so. After all, the true efficiency gains from convertibility can only come about with the opening of an economy to international trade, services, and capital markets. It has to be recognized, however, that for countries with highly protected economies, these moves can involve considerable dislocation of firms and entire economic sectors, entailing high social costs, as economic agents will inevitably alter their spending and saving decisions when offered greater, and undistorted, freedom of choice. These costs, at least in the short run, will be higher, the more artificially insulated the country has been from the world economy.

Meanwhile in Eastern Europe

Inconvertibility is hardly limited to Eastern Europe, or even to centrally planned or socialized economies, in general, as many countries have overvalued exchange rates, administered prices, distorted resource allocation, and extensive restrictions on trade and payments. While all six Eastern European countries that either are Fund members (Hungary, Poland, Romania, and Yugoslavia) or applied for membership in 1990 (Bulgaria and Czechoslovakia) maintain bilateral payments arrangements with other Fund members and with nonmembers as of the end of 1989, there are another 39 Fund members who also maintained such arrangements among themselves.

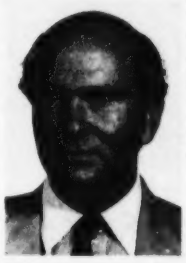
In essence, therefore, the convertibility issue faced by the countries of Eastern Europe is similar to that confronting other Fund members, and the preconditions for establishing convertibility discussed earlier apply to all countries. Indeed, these conditions constitute the core of much of the Fund's policy advice to members within the context of annual consultations or Fund-supported programs. The details need to be examined on a case-by-case basis, depending upon the initial degree of convertibility, the state of economic development, structural and market features, confidence factors (such as the public's faith in the government's ability to pursue the necessary policies), and the extent to which appropriate economic policies have been carried out in the past.

For countries wishing to profit from participation in the world economy, inconvertibility is no longer an option. Modern communications, the ease of travel, the size and sophistication of international capital markets, and the importance of trade for even formerly autarkic economies mean that countries have relatively limited margins for insulating themselves from the discipline of the market. And it should be stressed that attempts to do so also exact enormous economic costs because draconian restrictions are required. Moreover, partial convertibility, except as a transitional mechanism, will not work. Restrictions will be evaded and parallel markets will emerge. Not surprisingly, therefore, more and more countries are dismantling restrictions, introducing market-determined exchange rates, and adopting appropriate macroeconomic policies, often in the context of Fund-supported programs.

When considering calls for convertibility of Eastern European countries, it is important to keep in mind that they are starting from diverse economic situations in terms of the degrees of central planning, use of the price mechanism, and privatization. Moreover, in many ways, events have overtaken the initial cautious calls for gradualism. For example, the likelihood of organizing economic relations through the Council for Mutual Economic Assistance, or other regional arrangements, diminishes as country after country—Hungary, the Soviet Union, and Yugoslavia—announces its intention to move to convertible currency settlement in 1991. While Poland and Yugoslavia have already established foreign exchange markets, the other Eastern European countries have started to nudge their currencies closer to market-clearing levels. In addition, other critical steps are being taken: Hungary allows enterprises to trade excess transferable ruble proceeds among themselves; Czechoslovakia and the Soviet Union have held foreign currency auctions; and in Hungary, Poland and Yugoslavia, foreign currency deposits are freely held and constitute a significant portion of the total money supply.

Since the beginning of 1990, Poland and Yugoslavia have undertaken bold experiments, which will also set examples for other countries in Eastern Europe and elsewhere. The first step has been the introduction of "resident" convertibility for their currencies at fixed exchange rates, the appropriateness of which will be kept under review. (This means that residents can freely convert domestic currency at a given exchange rate and use those funds to spend abroad on most current transactions, but nonresidents—for the moment—cannot do so.) In both countries, the necessary preconditions had been met: realistic exchange rates had been introduced, supported by appropriate policies. Over time, the structures of domestic prices and resource allocation, assisted by legal reform and privatization, should align themselves, but perseverance in the face of significant transitional costs will be required. An alternative sequence involving completion of structural reforms, as a precondition for the move to opening up the economy, also entails costs.

In the sequencing of reform measures, a rapid move to convertibility can play an especially important role in Eastern European countries, all of which have been characterized by highly monopolized sectors of the economy. Introducing convertibility would facilitate foreign trade, so that foreign competition could substitute to some extent for the initial lack of a competitive domestic market structure. It would also eliminate the need for regulation and bureaucracy, which could facilitate the inflow of foreign private capital and send a signal to the international community that a serious commitment to trade liberalization and reform was in place. In addition, convertibility—when combined with anchoring the exchange rate to a reserve currency—would enable governments to increase the credibility of their commitment to fight inflation. This allows them to take advantage of the established credibility of a foreign central bank, possibly alleviating the degree of severity of the monetary shock needed to establish their own credibility. ■



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International Currencies: The Rise of the Deutsche Mark

Why the German currency is being used increasingly worldwide

George S. Tavlas

How does a national currency acquire the status of an international or key currency? This question is being asked anew as the deutsche mark takes on increasing importance on the global scene. The postwar world was dominated by two currencies, the US dollar and the pound sterling. But, as explained by Robert Aliber, they "became international currencies neither by Act of Congress (Parliament) nor by Act of God, but rather because they met various needs of foreign official institutions and foreign private parties more effectively than other financial assets could" (*The Future of the Dollar as an International Currency*, New York, 1966).

One of the factors underlying the adoption of a managed floating exchange rate system in 1973 was the desire to move away from the dollar standard that characterized the Bretton Woods fixed rate system. Although the international monetary order continues to be dominated by the dollar, in recent years we have seen the gradual move toward a multicurrency system. Other currencies—including the deutsche mark and the yen—are being increasingly used internationally. This article explains the characteristics of an international currency and the factors that affect them, before discussing the extent of the internationalization of the deutsche mark in recent years.

An international currency

An international currency fulfills three basic functions in the global monetary system: it serves as a medium of exchange, unit of account, and store of value. As a *medium of exchange*, an international currency is used by private agents in foreign trade and international capital transactions. Official agents use international currencies to intervene in foreign exchange markets and for balance of payments financing. As a *unit of account*, an international currency is used for invoicing merchandise trade and for denominating financial transactions. International currencies are also used by official agents in defining exchange rate parities. As a *store of value*, international currencies are held by private agents as financial assets (e.g., in the form of bonds held by nonresidents). Similarly, official agents (such as central banks) hold international currencies and financial assets denominated in such currencies as reserve assets.

Two sets of factors are essential if a currency is to be used internationally. First, there needs to be confidence in the value of the currency and in the political stability of the issuing country. Second, a country should possess financial markets that are substantially free of controls, broad (i.e., contain a large assortment of financial instruments), and deep (i.e., there exist well-developed secondary markets). It should also possess financial institutions that are sophisticated and competitive in offshore financial centers.

Regarding the first factor, high and variable inflation rates—relative to those of other countries—generate nominal exchange rate depreciation and uncertainty. This increases the costs of obtaining information and performing efficient calculations about the prices of tradable goods and capital assets, thereby undermining the use of a currency as an international unit of account, store of value, and medium of exchange. Further, inflation increases the costs of holding a currency by eroding its purchasing power, thereby debasing the currency as an international store of value and medium of exchange. While holding a relatively high inflation currency in an interest yielding form can offset some of the inflation cost, such holdings still entail increased costs of calculations and are associated with higher risk.

The achievement of relatively low levels of inflation and of inflation variability depends importantly on stable and consistent government policies. In this connection, a track record of sustained current account deficits in excess of normal private capital inflows (i.e., those capital inflows that exist in the absence of undue restrictions on trade or special incentives to incoming or outgoing capital) can lead to continuous exchange rate depreciation, eroding confidence in the currency.

On the need for well-developed and free financial markets, in general, just as relatively low levels of inflation and inflation variability contribute to the demand for international currencies, well-developed financial markets facilitate the supply (as well as the demand) of such currencies. Thus, the large and free financial markets of New York and London contribute to the use of the dollar and the pound sterling, respectively, as international currencies.

The absence of financial market controls contributes to lower costs of transacting in a currency than would otherwise be the case. Correspondingly, a country that possesses financial markets that are broad and deep is in a position to serve as an international banking center. Specifically, such a country can be expected to provide a high degree of efficiency in international liquidity transformation by accepting short-term, liquid, liabilities denominated in its own currency, while making long-term, less liquid, loans abroad.

While the foregoing conditions are important determinants of international currency use, they do not fully explain why a currency emerges as a dominant international currency. In this regard, studies of invoicing

A longer study "On the International Use of Currencies: The Case of the Deutsche Mark," IMF Working Paper (WP/90/3), is available from the author. A revised version of the Working Paper will be published in the Princeton University series Essays in International Finance.

practices between exporters and importers have shown that the international dominance of a nation's currency appears to be directly related to the country's share of world exports, the proportion of specialized manufactured products in its exports, and the extent of its trade with developing countries.

These observed behavioral patterns reflect the tendency for trade between developed countries to typically be denominated in the currency of the exporter. Importers often refrain from currency hedging because forward markets are typically thinner than spot markets and therefore entail larger bid-ask spreads. Importers often guard against currency fluctuations by passing through the consequences of exchange rate changes to their customers in the domestic market in the form of higher prices. This course of action is most practical in small, open economies in which a large domestic import-competing industry does not exist and helps explain why trade between developed and developing countries is usually denominated in the currency of the developed countries. Exporters are also more likely to have an incentive to invoice in their own currency to guard against unforeseeable exchange rates. They cannot easily cut factor payments that had been previously set via contracts, particularly in the case of manufactured exports involving long production lags. Exporters can use the forward market to cover their risk but this increases their costs. It is more expedient to pass the risk off to the importer.

The combination of all these factors—relatively low inflation, broad and deep financial markets, and pertinent trade patterns—fosters the use of a currency for international transactions. Against this background, we can examine the use of the deutsche mark as an international currency since the 1970s.

Inflation and monetary policy

Keeping the value of money stable has been the aim of the Deutsche Bundesbank ever since its establishment. Since 1975 that aim has been pursued by formulating and announcing monetary growth targets. A similar anti-inflationary orientation for monetary policy was also adopted in the 1970s by a number of other large industrial countries, including France, Italy, Japan, Switzerland, the United Kingdom, and the United States. Underlying this medium-term approach was the view that in the short run, monetary growth is an important determinant of nominal income growth and the balance of payments, and that over the medium term, its primary impact is on inflation and the nominal exchange rate.

In comparison with these other major industrial countries, the medium-term orientation of Germany's monetary policy has been quite successful in maintaining a stable internal value of the deutsche mark. In fact, over 1970–89 Germany experienced the lowest average annual inflation rate (3.9 percent) among these countries. The Bundesbank's success in controlling inflation established credibility for Germany's monetary policy and led eventually to the deutsche mark being used, in effect, as the nominal anchor for the other currencies participating in the Exchange Rate Mechanism (ERM) of the European Monetary System. In turn, this situation has allowed Germany to retain a fair degree of domestic monetary independence and decreased the volatility of its nominal exchange rate against the currencies of its EMS partners.

German financial markets

But the Bundesbank did not favor a broad international role for its currency until the mid-1980s, when it acknowledged the difficulty of inhibiting market forces underlying the demand for deutsche mark-denominated assets. During the period encompassing the late 1960s through the early 1980s, the Bundesbank attempted to moderate the international use of the deutsche mark. Underlying this approach—which emerged under the Bretton Woods fixed exchange rate regime—was the view that substantial swings in capital flows could impede domestic stabilization objectives. While the move to a floating exchange rate system increased the Bundesbank's control over domestic monetary conditions, the gain in control may have been less for Germany than for other large developed countries in view of the relative openness of the German economy. In particular, the Bundesbank's view was that the relative openness of the German economy in terms of foreign trade made that economy particularly susceptible to the consequences—including on inflation—of exchange rate changes.

Consequently, to tighten its grip on domestic monetary conditions, the Bundesbank extended relatively firm control over capital inflows. In this context, a "gentleman's agreement" entered into by the Bundesbank and the German banks in 1968 stipulated that only German banks could lead syndicates for deutsche mark-denominated bonds. The rationale underlying the agreement was that German banks would be more apt to follow the advice of the Bundesbank than would foreign banks and therefore could be more effectively controlled. A second important restriction concerned the kind of bonds that could be issued. Only the standard fixed rate bond was permitted. Innovative financial instruments—including floating rate notes, zero coupon bonds, and bonds linked to currency and interest rate swaps—were strictly prohibited. Finally, in the 1970s, there were also restrictions against the holding of German securities by foreign official institutions, thereby limiting the use of the deutsche mark as a reserve currency.

These and other restrictions, including a withholding tax on interest income, which was announced in late 1987, weakened the competitive position of German banks vis-à-vis foreign banks, while the surge and increased variability in inflation during the 1970s rendered fixed rate bonds less attractive than other, more flexible instruments. These developments led to innovations aimed at eroding the regulations, an effort facilitated by technological improvements (e.g., in data processing) that lowered transaction costs. For example, in 1983 a foreign deutsche mark bond issue had been used to arrange a currency swap, allowing foreign access to the deutsche mark bond market. Subsequently, to maintain the competitive position of the deutsche mark relative to other currencies, the Bundesbank has lifted most financial market restrictions in recent years, with the withholding tax abolished as of July 1989.

Nevertheless, partly because of Germany's relatively late move to ease restrictions, the breadth and depth of German financial markets have lagged behind some other large financial centers, most notably London and New York. Further, a turnover tax on all secondary market dealings in bonds and equities has prevented the establishment of a market in short-term commercial instruments and encouraged the switching of secondary trading in deutsche mark-denominated instruments to foreign financial centers. Also, the equity market is not as developed as the New York and London equity markets, and futures trading has only recently been allowed. While measures have recently been taken to enhance Germany's competitiveness in these areas, the relatively late shift to more open financial markets has restricted Germany's relative efficiency in competing for international funds.

Trade patterns

Developments in Germany's trade patterns in recent years have generally been conducive to the international use of the deutsche mark on several accounts. First, in 1986, Germany became the world's largest exporter, surpassing the United States, thus enhancing the potential role of the deutsche mark in global invoicing. Germany remained the world's largest exporter until 1989, when the United States regained the position of the world's largest exporter. Second, over 1980–

88 the share of specialized manufactured goods (primarily machinery and transport goods) in relation to total German exports rose from 45 to 48 percent.

On the other hand, Germany's trade with developing countries has decreased in recent years. Exports to developing countries as a share of total German exports declined from about 26 percent in 1980 to 19 percent in 1988, and imports from developing countries as a percentage of total German imports declined from 29 percent to 21 percent. These declines, however, have been more than offset by a rising proportion of German trade with other European countries. For example, German imports from EC countries rose from 62 percent in 1980 to 70 percent in 1988. Given that EC countries have in recent years invoiced a growing proportion of their exports in deutsche marks, the decline in Germany's trade with developing countries need not imply an overall decline in the share of world trade denominated in deutsche marks. Moreover, corresponding declines in trade shares with developing countries were experienced by most other large developed countries—including Japan and the United States—during the 1980s.

The preceding discussion suggests that, in general, the determinants of international currency use presage an expanding international role for the deutsche mark. Recent data trends confirm this expectation. There has been an increase in the use of the deutsche mark as an international unit of account, with a growing share in the deutsche mark-denomination of world exports. Taking into account the invoicing practices of the six largest industrial countries and of the Organization for Petroleum Exporting Countries, as well as these countries' share of world trade, the following trends emerge: in 1980, at least 34.5 percent of world exports were denominated in dollars while 10.2 percent were denominated in deutsche marks; by 1987, the respective numbers were: 24.8 percent in dollars and 12.4 percent in deutsche marks.

Other uses

As mentioned earlier, one measure of a currency's role as an international medium of exchange is its use in exchange market intervention by central banks. In this connection, the deutsche mark is one of two currencies used for intervention by the US Federal Reserve and the US Treasury, the other currency being the Japanese yen. In fact, the deutsche mark has accounted for more than half of US intervention throughout the 1980s, although its share vis-à-vis the yen has declined (see Table 1). Further, the share of deutsche mark intervention within the European Monetary System has risen from about 24 percent in the early 1980s to almost 60 percent in recent years, with most of the increase coming at the expense of the dollar. Again, the data reflect the increased use of the deutsche mark by European countries.

Table 1
Currency distribution of foreign exchange intervention in the EMS and by the US Federal Reserve and Treasury[1]
(In percent)

	EMS		
	1979–82[2]	1983–85	1986–87[3]
US dollars	71.5	53.7	26.3
EMS currencies	27.2	43.5	71.7
Of which:			
Deutsche mark	(23.7)	(39.4)	(59.0)
Others[4]	1.3	2.8	2.0
	United States		
Deutsche mark	89.7	67.9	57.5
Japanese yen	12.3	22.1	42.5

Sources: "Interventions, Sterilization and Monetary Policy in the European Monetary System Countries" by C. Mastropasgua *et al.* 1988; Deutsche Bundesbank; and Federal Reserve Bank of New York.
[1]Total intervention includes both purchases and sales.
[2]From March 1979.
[3]Up to June 1987.
[4]From 1985 onward, the figures include intervention in private European Currency Units.

The use of the deutsche mark as an international store of value has also increased. Deutsche mark-denominated claims in Germany held by nonresidents more than doubled between 1980 and 1986, reflecting measures taken to deregulate the financial system in those years. However, the announcement in 1987 of the withholding tax decreased the demand for deutsche mark-denominated instruments. Consequently, deutsche mark-denominated claims held in Germany by nonresidents showed little overall increase in 1987 and 1988. The subsequent abolition of the withholding tax in 1989 led to a sharp increase in foreign deutsche mark claims held in Germany in that year. Taking the entire period 1980 through the first half of 1989, such claims almost tripled, rising to DM 585 billion. Likewise, deutsche mark-denominated claims outside Germany in the form of eurodeutsche mark deposits and external deutsche mark bonds, more than doubled, reaching DM 730 billion at the end of the period. In terms of the performance of the deutsche mark relative to other currencies, the deutsche mark's share of eurobond issues rose from about 6.5 percent in the early 1980s to about 9 percent in the late 1980s; during this period, the share of the Japanese yen rose from about 5.5 percent to 10.5 percent, while the share of the US dollar declined from 63 percent to 47 percent. Likewise, the share of deutsche mark eurocurrency deposits rose from 11 percent to 13 percent. The yen's share rose from 2 percent to 5 percent while the US dollar's share declined from 74 percent to 62 percent.

It is noteworthy, however, that most of the increase in the deutsche mark claims in Germany held by nonresidents was in long-term claims. The share of long-term claims rose from roughly 60 percent at the beginning of the 1980s to over 70 percent in the late 1980s. This reflects Germany's comparative disadvantage with regard to short-term financial instruments; as noted, the turnover tax on all secondary market dealings in bonds and equities has prevented the establishment of a market in short-term commercial instruments. In turn, this has restricted the efficiency of the German financial market in exercising one of the central functions of a key-currency country—notably in providing a high degree of efficiency in international liquidity transformation by being able to accept short-term liquid liabilities denomi-

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Table 2
Official holdings of foreign exchange, 1975–88[1]
(In billions)

	1975	1980	1985	1988
US dollar	79.4	68.6	64.2	63.3
Pound sterling	3.9	2.9	3.1	3.1
Deutsche mark	6.3	14.9	14.9	16.2
French franc	1.2	1.7	1.3	1.7
Swiss franc	1.6	3.2	2.3	1.5
Netherlands guilder	0.6	1.3	1.0	1.1
Japanese yen	0.5	4.3	7.8	7.2
Unspecified currencies	6.5	3.1	5.4	6.0

Source: IMF *Annual Report, 1989*.
[1]End-of-year data. Official holdings include monetary authorities' claims on nonresidents in the form of bank deposits, treasury bills, short-term and long-term government securities, European Currency Units, and other claims usable in the event of balance of payments need, including nonmarketable claims arising from intercentral bank and intergovernmental arrangements, without regard as to whether the claim is denominated in the currency of the debtors or the creditors.

nated in its own currency, while making long-term, less liquid loans abroad.

Currency shares of official holdings of foreign exchange from 1980 through 1988 are another measure of a currency's use as an international store of value (see Table 2). Comparing the average holdings in 1980–83 with the period 1985–88, the data show that the largest gains in shares were registered by the Japanese yen (2.9 percentage points) and the deutsche mark (2.3 percentage points). On the other hand, the shares of the dollar and Swiss franc fell by 5.4 percent and 1.0 percent, respectively.

Conclusion

The deutsche mark has emerged as an essential component of the international monetary system, to a significant extent because of the deutsche mark's increasing importance as a key currency within Europe. In this regard, recent actions taken to open trade and financial connections between Eastern and Western Europe should contribute to wider use of the deutsche mark as a transaction and reference currency within Europe. Indicative of the growing use of the deutsche mark within Europe was the decision, effective in January 1990, to peg the Yugoslav dinar to the deutsche mark. Another important move is the currency union between the two German republics, provided that it does not undermine the internal value of the deutsche mark. The essential requirements for the continued use of the deutsche mark as a key international currency are the maintenance of the Bundesbank's firm anti-inflationary bent, the further deepening and widening of German financial markets, and the continuation of Germany's role as a major world exporter. ■

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Adjustment in Major Oil Exporting Countries

Sharp fluctuations in the oil market since 1973 have forced major policy changes

Jitendra G. Borpujari and Melhem F. Melhem

The sharp oil price increases in the 1970s appeared to free the major oil exporting countries (MOECs) from the familiar development dilemma posed by the need to choose between immediate consumption and mobilizing savings to foster economic growth. Given the ample wealth that they were able to accumulate rapidly as a result of the more than threefold rise in oil prices in 1973–74, both consumption and investment could be increased at the same time. But as oil revenues and sales volumes began to decline in the 1980s—first gradually, then sharply in 1986—with only a partial recovery in subsequent years, these countries had to implement major policy adjustments in an effort to sustain real economic growth.

In all of these countries—Algeria, Indonesia, Iraq, the Islamic Republic of Iran, Kuwait, the Socialist People's Libyan Arab Jamahiriya, Nigeria, Oman, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela—oil exports play a dominant role, and in most cases, account for over 80 percent of total exports. Since oil is an exhaustible resource, they must either hold the oil in the ground or sell it and acquire other real or financial assets. Moreover, in view of the volatility of the international oil market and the limited diversification of their economies, prudence dictates that they maintain a relatively high level of foreign exchange reserves.

For them, the policy challenge is quite clear. During times of rising oil export receipts, they must take steps to ensure sustainable real economic growth, rather than a mere rise in current consumption. In addition, an enduring—as against an episodic—increase in real income requires a reduction in the economy's dependence on the volatile world demand for oil. In assessing how well the MOECs have adjusted to their shifting financial situation over the past two decades (and what remains to be done), therefore, we should evaluate whether changes in real output have been accompanied

by progress toward economic diversification, a reasonable stability in domestic prices, and a viable external payments position. While data limitations preclude a detailed analysis, indications so far point to a qualified success for the group as a whole, with some having performed better than others, because of considerable variations structurally as well as geographically.

Financial environment

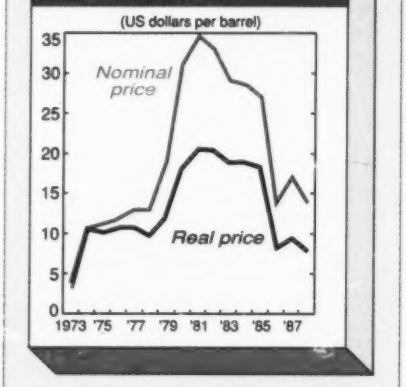
Producer restraints on output have at times played a major role in both spurring a rise and in stemming a decline in world oil prices. However, the nominal export price, the import purchasing power, and the export volume of oil have been influenced primarily by outside forces, both economic and noneconomic. In general, oil prices have risen during extraordinary times of wars and political disruptions, and fallen as the higher prices have stimulated new oil discoveries and promoted conservation.

The nominal price of oil in US dollars fluctuated narrowly around a relatively low level during the century prior to the sharp rises and subsequent falls that began in October 1973. In the wake of disruptions in the Middle East and subsequent restraints on supply by producers, the average oil export price for the MOECs jumped from about $3.20 per barrel in 1972 to $10.50 in 1974, followed by an average annual increase of about 5 percent during 1975–78 (see Chart 1). Then in 1979–80, following the panic buying surrounding the Iranian revolution, oil prices surged once again, reaching an unprecedented $33.70 in 1981.

On the demand side, these price increases stimulated substitutions of non-oil fuels and adoption of energy-saving devices in industry, along with improvements in home insulation and a switch to more energy-efficient automobiles, particularly in the major industrial economies that are the main importers. On the supply side, they also facilitated exploitation of the higher cost oil fields in the North Sea and Alaska North Slope, as well as in Mexico and other developing countries. These developments gradually brought oil prices down by about 6 percent per year during 1982–85, before the plunge of over 50 percent in 1986. A subsequent marked recovery in 1987 was rolled back partially in 1988, although by the end of 1989, prices were again above the 1987 level. In general, inflation abroad substantially eroded the real price, or the import purchasing power, of oil for the MOECs. Indeed, 1973–74 and 1979–80 were the only years when the nominal price surged sharply ahead of inflation.

Oil revenues for the MOECs were also adversely affected by production developments. While world oil output increased from about 56 million barrels per day (b/d) during 1973–75 to a record 66 million b/d in 1979, oil production of the MOECs declined marginally during the period as they kept more of the oil in the ground in an effort to support prices. This falloff in output intensified during the 1980–87 period. World oil consumption was on the decline, and the MOECs wanted to continue to support prices by maintaining production restraint as an offset to the substantial increase in production that was taking place in other oil producing countries. As a result, their combined current account—which had been in surplus virtually throughout the 1970s, topping $110 billion in 1980—swung into a deficit in 1982, where it remained, with one exception, through 1988 (see Chart 2). The financial latitude of the 1970s was gone, succeeded by a reemergence of foreign exchange as a constraint on development.

Chart 1
Fluctuations in oil prices since 1973



Sources: Official sources, and IMF staff estimates.

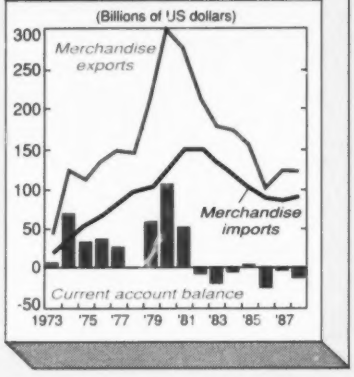
Adjustment efforts

Throughout these turbulent years, the MOECs turned to fiscal policy as the main instrument of adjustment, a reflection of the fact that their governments (not the private sector) are both the recipients and disbursers of oil export receipts, the economic mainstay. During the 1970s, the sharp rise in oil revenues enabled them to substantially boost expenditures, although the shift to fiscal expansion in 1979–81 was less pronounced than that following the 1973–74 oil price increases. The expansionary policies brought about a rapid development of the economic infrastructure, as well as a more diversified production structure and improvements in the welfare of their populations. Newly built port, road, and airport facilities eliminated physical bottlenecks that had been inhibiting growth in both imports and domestic output. Public investments in oil-and gas-based industries, such as fertilizers and petrochemicals, were increased. Subsidies were extended to encourage private investments in agriculture and a wide range of industries—notably food processing, building materials, and downstream products such as plastics. Moreover, a rapid expansion of schools, hospitals, and utilities improved services for the population (including the growing expatriate labor force), effectively redistributing income toward the lower-income groups. In addition, a number of these countries shifted some of the oil income to other developing countries through a liberal employment of expatriates and substantial foreign aid.

This rapid buildup of economic and social infrastructure was seen in all of the MOECs, although the impact on fiscal positions varied widely. The countries in what we will call Group I—Kuwait, Libya, Oman, Qatar, Saudi Arabia, and the United Arab Emirates—were able to substantially improve their infrastructure, as well as maintain a budgetary surplus and increase reserves. This was in large part thanks to relatively small populations and the sharp rise in oil revenues. By contrast, the more densely populated Group II countries—Algeria, Indonesia, Iran, Iraq, Nigeria, and Venezuela—found their budgetary positions turn into deficits after 1975 (see Chart 3). The perception that oil price increases were permanent also led to borrowings against anticipated future earnings, thus in many cases leading to a buildup in debt.

With the fall in oil income in the 1980s, however, fiscal restraint became essential for all MOECs. In most cases, the adjustment effort was far-reaching, although only a few adopted deliberate financial programs within an explicit macroeconomic framework. The initial spending cuts involved mainly a stretching out of the development effort through cancellation of low priority schemes, postponement of completion targets, and limits on new undertakings. This slowdown was in part a natural sequel to the preceding rapid expansion, as the bulk of the large infrastructural projects had been already completed. In addition, all MOECs introduced stricter controls on current expenditures. A number of countries moved forcefully to reduce budgetary transfers and cut subsidies through increased prices of controlled commodities, including basic consumer goods; employment and wage policies were also revised. Saudi Arabia's total budgetary spending, for instance, was reduced substantially between 1981 and 1988. On the revenue side, discretionary increases in non-oil taxes, energy prices, and administrative fees were

Chart 2
MOEC balance of payments in a shifting financial environment



Sources: Official sources, and IMF staff estimates.

generally implemented, but these measures played a relatively small role, especially in the Group I countries, given the dominance of oil receipts.

Once again, the impact on fiscal positions varied from country to country, but in general, the less populated and wealthier countries in Group I managed larger and speedier reductions. Oil being their only significant source of income, they had to act quickly as revenues fell off sharply. Saudi Arabia, for instance, took a relatively large cut in oil production in an effort to support prices. Then, too, for some, fiscal restraint was made easier by an ability to shift at least a part of the adjustment onto the expatriate labor force. The countries in Group II, however, had relatively less room to maneuver, especially as they were now faced with heavy debt burdens to service. In the case of Iran and Iraq, there was the overriding consideration of a costly war.

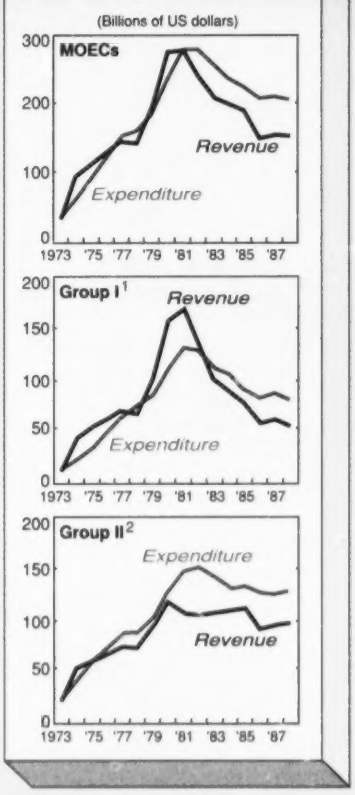
What did these measures mean, however, for the efforts begun in the 1970s in these countries to ensure real economic growth?

Diversification. The generally restrictive fiscal stance of the 1980s notwithstanding, the MOECs remained committed to diversifying the domestic production base. Financial incentives (such as direct subsidies) were decreased, but indirect subsidization continued. Besides infrastructural support, domestic non-oil production received such encouragements as preferred treatment for local enterprises in awarding government contracts, selective bans on participation by foreign contractors, and meeting the private sector's credit needs on concessional terms through specialized banks. In addition, exchange rate policy—notably, depreciation in such countries as Venezuela, Indonesia, and Nigeria—has been used to curb imports and encourage non-oil production.

As a result, the real non-oil output of MOECs has managed to register increases during most of the decade and a half since October 1973, although the rate of increase has fallen back sharply in line with the more restrictive fiscal stances. Over 1974–80, the average annual growth rate of non-oil output was around 13 percent, but this dropped to only 2 percent during 1981–88, reflecting mainly the falloff in budgetary spending and the effects of the Iran-Iraq war. The slowdown was most pronounced in construction, which diminished in importance following completion of most major infrastructural projects. Growth also slowed in the non-oil industrial sector, which was dominated in several cases by production of building materials.

Thanks to the diversification efforts, non-oil exports—including oil- and gas-based products—rose sharply in US dollar terms from a relatively low level, by an annual average of 21 percent over 1974–80. This rate then decelerated to some 6 percent for most of the 1980s—reflecting in part the effects of the Iran-Iraq war and a reduction of subsidy-dependent exports. However, the importance of non-oil exports for various countries has also varied greatly. In Group II countries, with their large non-oil resources, non-oil exports have accounted for as much as 25 percent of total exports. This contrasts with the thinly populated Group I countries, where the figure has at times been less than 15 percent. The latter group has relatively few non-oil resources, and has pursued international portfolio and equity investments. In Kuwait, for example, investment income from abroad has exceeded oil as the most important source of foreign exchange earnings in recent years.

Chart 3
Changing fiscal balances in the MOECs



Sources: Official sources, and IMF staff estimates.
[1] Includes Kuwait, Libya, Oman, Qatar, Saudi Arabia, and the United Arab Emirates.
[2] Includes Algeria, Indonesia, Iran, Iraq, Nigeria, and Venezuela.

Price stability. Concern about a flare-up of inflationary pressures has abated, as most MOECs have made a smooth transition from the high growth rates of the mid-1970s to the lower growth rates of the 1980s. Inflation, once running at an estimated annual average of some 13 percent (1974–80) has gradually subsided to around half that rate since 1981. This has occurred in large part due to the elimination of most of the physical bottlenecks that were holding up imports in the early 1970s, a general avoidance of administrative limitations on trade and current payments, and the global slowdown of inflation during

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most of the past decade and a half. Moreover, fiscal, credit, and exchange rate policies have helped keep domestic demand under restraint in most MOECs.

External payments developments. Faced with falling oil receipts, the MOECs sharply cut back imports through fiscal restraint, occasional exchange rate depreciation, and in a few cases, quantitative restrictions. As a result, average annual import payments declined during most of the 1980s, after growing by 30 percent in 1974–80. The lower level of economic activity also reversed the upward trend in payments abroad for services and led to a drop in workers' remittances from these economies. The overall balance in the current account was further aided by the emergence of investment income as a major positive element, particularly for the countries in Group I. Thus, although the surpluses of the 1970s turned into deficits in the 1980s, the MOECs succeeded in limiting the deterioration.

Where the MOECs stand

While the timing and details of policy responses have varied widely, the MOECs as a group have managed to exercise fiscal restraint—doing so in a selective manner that has enabled non-oil output to continue to grow, albeit at a considerably slower pace. Inflationary pressures have abated, a deterioration in the balance of payments has been contained, and the economies have been further diversified, although they are still heavily dependent on oil. Besides large untapped reserves of oil and gas, most of these countries now have a modern economic infrastructure as well as a sizable industrial base. While the financial difficulties confronting a number of these countries, particularly in Group II, have been severe at times, the MOECs on the whole have remained stronger than most other developing countries.

All the same, the adjustment effort is still far from complete, and perseverance is imperative, despite the recently improved outlook for oil prices. Reductions in fiscal outlays have generally failed to keep pace with revenue declines, and while subsidies have been cut, they still weigh heavily—directly and indirectly—by way of, for instance, low energy prices and public utility rates. Moreover, much remains to be done to improve the efficiency of the public enterprises, which are frequently dependent on budgetary subsidies. Also, a greater effort is called for in all of these countries to expand and diversify the tax base so as to lower dependence on the volatile receipts from oil.

The need to continue with the diversification effort under a more restrained fiscal stance underscores the importance of mobilizing domestic savings and channeling these into productive investments. The widespread practice of maintaining interest rates at levels below those prevailing abroad, in particular, must be reviewed, if savings are to be stimulated, and capital flight, discouraged. Then, too, the persistence in some cases with price controls, as well as substantially overvalued exchange rates, has impeded the growth of efficient and competitive industries under private initiative. Finally, the adjustment effort needs to phase out the instances of tariffs, subsidies, and other more indirect shelters that have encouraged the emergence of uncompetitive industries. ■

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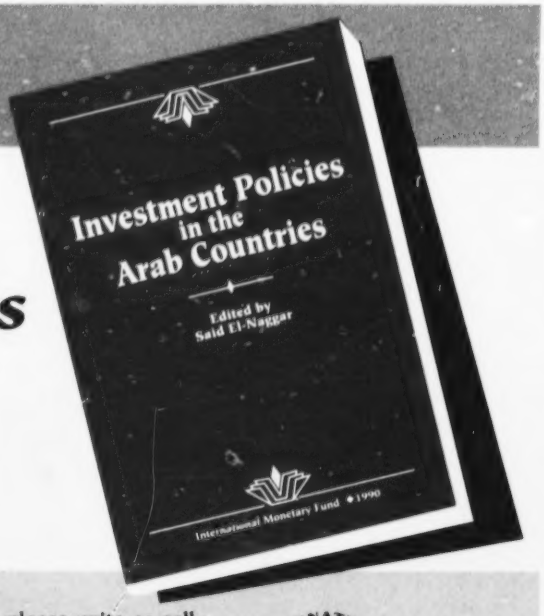

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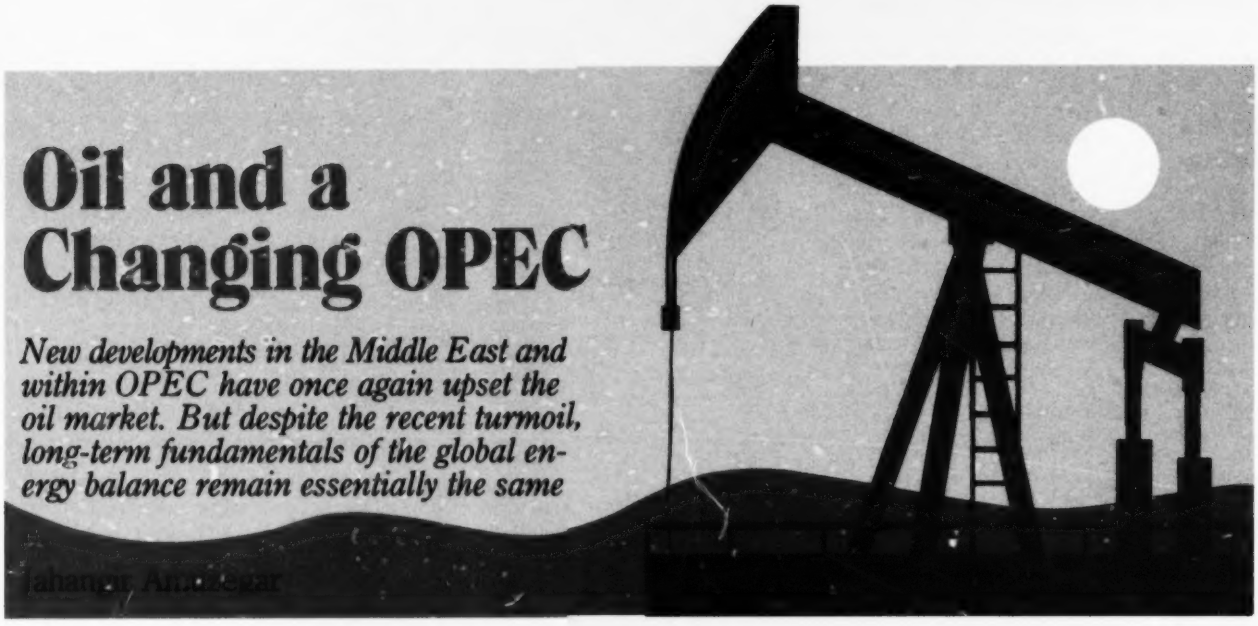
Oil and a Changing OPEC

New developments in the Middle East and within OPEC have once again upset the oil market. But despite the recent turmoil, long-term fundamentals of the global energy balance remain essentially the same



Jahangir Amuzegar

Back in mid-1986, there was widespread jubilation in major oil consuming countries over the price collapse. The end of the Iran-Iraq war was predicted to turn the 1986 oil glut into a flood, with the oil price seen heading toward a $5 barrel. OPEC's (the Organization of Petroleum Exporting Countries) relative importance in strategic oil supply calculations was regarded as permanently diminished. The organization's demise (predicted many times since 1973) was pronounced with more certainty this time. But, as some observers warned at that time (see "Oil Price Turmoil" *Finance & Development*, June 1986), the situation could change rapidly; and it did.

Several developments in the last four years—before the Iraq-Kuwait conflict—are worth noting. First, annual demand for oil increased worldwide despite a rise in oil prices. Second, crude prices followed an upward trend, albeit at fluctuating rates and still lagging in real terms behind those in 1980. Third, after a decline in the 1980s, OPEC's share in the global market supply moved up, although still below the 1979 level. Fourth, a spirit of pragmatism within OPEC, and a tacit understanding with some non-OPEC producers, produced a cease-fire in the oil price war. Fifth, OPEC's annual oil revenues recovered dramatically to nearly double the mid-1980s level, although still only slightly more than half the annual income at the beginning of that decade. Finally, a new "oil balance" emerged, although the basic issues facing major oil consuming nations seem to remain largely the same as before the first oil crisis. It is time now to take a fresh look at the oil market and the changing nature of OPEC.

Recent developments

Changes after mid-1986 and mid-1990 in world oil demand, price, output, market structure, and global balance reflect vastly different crosscurrents. World oil consumption, earlier projected to rise by no more than 1–1½ percent a year, increased more than twice as fast, and is now projected to grow by 1½–2 percent a year for several years, should the oil price remain at around $20 a barrel in constant 1990 dollars. As a result of rising oil demand, crude prices firmed up. Despite periodic forecasts of a durable oil price collapse (the latest in 1988–89), world oil prices rose between 1987 and 1990. Interestingly, while OPEC exports steadily increased by more than 50 percent since their lowest volume in 1985, average crude oil prices also increased in tandem—albeit in a volatile manner. The price rose from a low of $7–8 a barrel in July 1986 to $23.60 in January 1990, then turned back to $13–14 a barrel in late spring, recovered to $18–20 a barrel shortly before the Iraq-Kuwait conflict, and reached $26.50 a barrel on August 6, 1990. Contrary to expectations, the 1988 Iran-Iraq ceasefire had a positive influence on the oil price. In real terms, however, the mid-1990 oil prices still remained lower than they were in 1974.

The global oil supply structure also changed markedly (see table). US domestic oil output has declined steadily in recent years, reaching 7.6 mb/d (million barrels per day) in the first half of 1990—a 26-year low. It is projected by most analysts to fall to 6.4 mb/d in 1995, and 5.8 mb/d by the year 2000—barring new technological breakthroughs and no appreciable rise in the real price of oil. The Soviet Union has also seen its output fall from 12.6 mb/d in 1987 to a low of 11 mb/d in early 1990, with a possible further decline by 1995—without considerable new investments in exploration and drilling. In the likely absence of new Alaskan or North Sea oil discoveries, and excluding a new price explosion, non-OPEC countries as a whole are expected to continue at, or below, their current output levels. Sustainable excess capacity in all these countries is currently no more than 1 mb/d. OPEC's excess capacity, by contrast, is already three to four times as much, and it is expanding.

In addition to changes in oil consumption and sources of supply after mid-1986, a new

change occurred in the attitude toward energy efficiency. Despite some scattered voices of caution, the drive toward energy conservation (and oil substitution) seemed to lose much of its steam. On the conservation side, the ratio of global energy use to growth of world gross product, which was brought down to 0.5 in the early 1980s from 1 in the 1970s, climbed back to 0.75. Regulations on fuel use have been relaxed. Larger motor vehicles and longer automobile trips have become desirable again. On the substitution side, coal, natural gas, nuclear energy, and exotic alternatives have not been able to replace petroleum due to the still relatively low price of oil, the high production costs of alternatives, environmental considerations, safety concerns, or infrastructural requirements.

Oil supply and demand
(In millions of barrels per day)

	1979	1985	1989	1995[1]	2000[1]
Demand					
OECD	41.6	34.1	37.3	38.9	38.9
OPEC	2.7	3.6	3.9	4.0	4.2
Other[2]	7.9	8.8	10.6	11.9	13.4
Total	**52.2**	**46.5**	**51.8**	**54.4**	**56.5**
Supply					
OECD	15.1	17.4	16.0	14.6	14.1
OPEC	31.7	17.5	23.5	26.0	29.5
Other	5.9	9.5	9.6	10.5	10.0
NME net[3]	1.1	2.0	2.1	1.9	1.5
Stock changes[4]	1.6	0.1	0.6	1.4	1.4
Total	**52.2**	**46.5**	**51.8**	**54.4**	**56.5**

Sources: US Department of Energy; International Energy Agency; UN Secretariat; Ashland Oil Company.
[1]Based on a price of $17.50 a barrel, in constant 1988 dollars.
[2]Excluding the Soviet Union, Eastern Europe, and China.
[3]Net exports from nonmarket economies.
[4]Addition or withdrawal from stock, and discrepancies.

Changes in the market

By far the most noteworthy developments, however, occurred in the structure of the oil market, with OPEC gaining some lost ground. OPEC began to enjoy an increasingly dominant position as a residual supplier, having developed a new market strategy, new intragroup relationships, and stepped up its search for a larger global oil coalition. The increase in world oil demand since 1986 was met mostly by OPEC members.

A significant trend could be observed in OPEC's price and marketing strategy. Long considered to be an oil price setter and defender of an official selling price, OPEC began to treat the organization's official price (e.g., $21 per barrel, set in mid-1990) only as a "reference" target rather than a fixed price to be strictly maintained by mandatory changes in output. The old, unilateral, posting of oil prices was replaced by a complex and interactive process in which OPEC is only one of the major players. Noncontract (spot) sales, oil futures, options, and paper-barrel transactions in New York and London are priced by market forces of demand and supply. OPEC's influence in both short- and long-term price trends takes different forms. Members' daily output and sales directly affect prices. Disputes among OPEC members, quota decisions, policy declarations, and even statements by OPEC leaders tend to influence market prices indirectly and often inordinately.

There is, however, an asymmetry on price control. Leading OPEC producers are quite potent in driving oil prices down to low levels almost anytime because they have the capacity to flood the market. But they find it much more difficult, if not impossible, to force prices up by much for an extended period, because their critical dependence on oil revenues keeps them from cutting output to very low levels. Sharp price rises are now often triggered by political events.

National price and output strategies within the organization also no longer follow the traditional pattern. For instance, not all large-reserve countries can be counted on to routinely advocate low oil prices; nor do all low-reserve members uniformly favor drastic production cuts, or a stiff price rise. The one thing all members seem to prefer is relative price stability because uncertainties with regard to future oil revenues play havoc with their domestic planning and budgeting operations.

Another aspect of OPEC's market strategy is a move toward a new relationship with the major multinational oil companies ("majors"). Joint ventures for "downstream" operations (distribution, sales, etc.), new oil exploration, and addition to capacity have been set up between national oil companies and the major multinational oil companies by Abu Dhabi, Libya, Nigeria, Saudi Arabia, and Venezuela. These joint ventures reflect a near-perfect marriage of convenience. The oil "majors" are anxious to replenish their own dwindling supplies of crude oil at home with supplies from secure overseas sources. On their part, OPEC members need venture capital and modern technology to increase their productive capacity—estimated at $60 billion for an addition of 6 mb/d; they also want to acquire reliable outlets within consuming countries for their exports.

Changes within OPEC

Prior to the Iraq-Kuwait conflict, OPEC's internal relationships reflected new realities. Despite occasional open rifts, public confrontation, and periodic breakdowns of discipline among members, OPEC's stance was increasingly guided by five lessons learned in the past few years:

- Attempts to raise market shares of members through discounts were found to be a losing proposition. (A 55 percent increase in oil exports by one member, because of price cuts, reportedly netted its treasury 20 percent less revenue.)
- A deliberate low-price policy on the part of large-reserve members to drive off marginal producers was seen as a double-edged sword: while inefficient foreign suppliers might indeed be driven off the market, the revenues of the large-reserve countries would be smaller, domestic development outlays would be jeopardized, public opposition would be encouraged, friendly coproducers would be antagonized, and foreign governments would be enticed to impose an oil import fee in order to protect domestic producers. OPEC's lost revenue in the 1986 price war exceeded $50 billion, according to one estimate.
- Low-revenue members had come to realize that an overly rapid rise in oil prices would lead to increased oil supplies, emergence of alternative fuels, conservation efforts on the part of consumers, endless friction over output quotas, and macromanagement problems at home.
- Almost all members reached the conclusion that their individual and collective survival depended on self-discipline in adhering closely to OPEC agreements on prices and production. The recalcitrants misjudged the consequences of their behavior.
- Finally, OPEC as a whole was able to do what it was originally created to achieve:

find a mutually acceptable position out of divergent members' interests, while preserving its collective solidarity against many odds.

Three other developments are also of interest. First, although officially OPEC had no "swing producer" after 1985 when Saudi Arabia declined that responsibility, an informal buffer existed at all times as some members chose to stick close to their assigned quotas and let other members take advantage of increased demand (and export beyond their production limits). This "tolerance," however, proved to have its limits for some members, as subsequent events showed.

Second, bargaining on quota allocation became more politicized than before. In addition to the traditional criteria, such as capital needs, size of population, proven reserves, and output capacity for claiming production quotas, members sought relative ranking in the 13-member line-up on the basis of national political and prestige considerations.

Third, there were attempts by some OPEC members to elicit formal or informal cooperation from other Third World oil exporters such as Angola, China, Colombia, Egypt, Malaysia, Mexico, and Oman to stabilize the oil markets. At an unprecedented joint meeting of those two groups in April 1988, attended also by two sympathetic Western observers from Norway and the Texas Railroad Commission, a 5 percent cut in output by both groups was proposed in order to support sagging oil prices. Although the idea of a joint production cut collapsed, some non-OPEC producers seem to have shown substantial restraint in their subsequent export policies.

The new "oil balance"

The foregoing changes in oil demand, price setting, output shares, and OPEC's stance have set the stage for the "oil balance" in this decade, and perhaps beyond. According to data published by the UN *World Economic Survey*, OPEC currently holds some 77 percent of the world's proven oil reserves of over a trillion barrels, and supplies nearly 47 percent of the world's annual oil needs outside Eastern Europe, China, and the Soviet Union. Further, OPEC members are the only oil producers with the capacity to substantially increase output as well as the potential for new discoveries of premium low-cost oil. Saudi Arabia and Iraq are already reporting large newly found reserves of high quality oil. Seven other OPEC members also have revised their reserve figures upward, and are expected to join these two countries in increasing their combined output capacity for a total of 5–6 mb/d by the mid-1990s. Despite Mexico's encouraging prospects, and promising new discoveries in Yemen and Syria—all non-OPEC producers—significant future increases in oil consumption will have to be met by OPEC sources, unless recent oil price increases should continue for some time.

Even with no appreciable increase in oil demand in the coming years, most analysts believe OPEC would still account for as much as 50 percent of global crude oil supply by the year 2000. OPEC is already heavily involved in other aspects of the oil industry. According to the *Petroleum Intelligence Weekly*, a New York-based newsletter, four of the ten largest international oil companies in terms of combined reserves, output, sales, and refining capacity, are fully owned by OPEC members.

The effects of the growing strength of OPEC on future oil prices and supplies will depend on the outcome of a set of countervailing forces at work in the global oil market. Factors that might lead to higher crude prices include: (1) the exhaustion of OPEC's present excess capacity (probably in two to three years) without new additional facilities, substantial new finds elsewhere, or more efficient extraction methods; (2) a return to the de facto truce among OPEC members until additional demands for OPEC oil eliminate the need for bargaining over production quotas; (3) greater homogeneity of interests and outlook among leading Middle Eastern members and Venezuela due to a gradual shrinkage of membership and the departure of low reserve members within the next few years; and (4) a dramatic increase in the concentration of power within OPEC, or other unforeseen major causes of supply interruptions.

Factors that would tend to hold down price increases include: (1) a severe and protracted worldwide recession; (2) accelerated search for new non-OPEC oil to increase supply; (3) a judicious management of strategic oil reserves in the consuming countries; (4) technological advances in reducing the cost of oil and gas exploration, and production of alternative energy sources; (5) a comprehensive worldwide effort to conserve energy; and (6) OPEC's own involvement in joint ventures and downstream operations in the consuming countries.

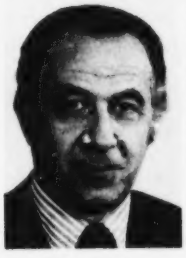
Projections of the real price of oil by the year 2000 vary widely, from $28 to $41 per barrel (in current dollars). The net result of the interaction of the above-mentioned forces seems to warrant three reasonably safe conclusions. First, thanks to the more than four billion barrels of crude oil stored in underground salt domes, tanks, pipelines, tankers, and other storage facilities, the possibility of a new oil shock reminiscent of 1973 and 1979, for all practical purposes, no longer exists—at least in the OECD countries. Available strategic reserves are enough to meet the OECD's oil needs for 60–90 days at current consumption rates. The large Western storage, if properly managed, can also serve as an equilibrating force on oil prices through periodic draw-downs and replenishment.

Second, investment in oil exploration and drilling in US offshore fields, the Soviet Union's Siberian and Caspian Sea regions, the North Sea, and parts of the developing world (in addition to OPEC's own capacity expansion) will be a good hedge against future oil shocks. So too will a faster development of alternative fuels. An equally effective strategy—particularly in the face of fast rising oil demand in Southeast Asia, other parts of the Third World, and Eastern Europe—would be to renew endeavors to increase energy efficiency.

Third, and perhaps most significantly, sustained high oil prices of the 1973 or 1979 magnitudes will be unlikely because the lessons learned in those events cannot be easily forgotten. The majority of OPEC and non-OPEC governments now see advancement of their long-term economic interests in meeting the consumers' needs at affordable prices. They know that a high oil price (or an oil embargo) is a recipe for the eventual loss of market share. Major consuming nations, in turn, have realized that an oil price that is too low now is a harbinger of higher prices later.

Unchanged basic issues

Surprising as it may seem, after the passage of 17 years since the first oil crisis, the original issues and equations remain essentially the same. Excluding some sort of accommodation with major oil exporters, major oil importing countries are still faced with the same realities. They have to adopt a comprehensive domestic energy policy to reduce consumption and increase fuel efficiency, and they must embark on serious efforts to develop alternative, renewable, energy sources. ■



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Agroforestry in Sub-Saharan Africa

Cynthia C. Cook and Mikael Grut
Africa Region, Technical Department, World Bank

Rapid population growth in Africa, without corresponding improvements in agricultural technology, has intensified pressure on arable land, leading to its overuse and the extension of cultivation onto unsuitable or marginal lands. It also has generated greater demand for fuelwood, building materials, and other products traditionally extracted from the forest. The result has been growing deforestation, increased wind and water erosion, and declining productivity of agricultural lands.

Faced with this spiral of environmental degradation, African governments and external donors have sought ways to reverse the process. But the task is enormous. If Africa's agricultural lands are to be saved, major efforts by the millions of people who live on the land will be needed.

The removal of trees and shrubs ranks as one of the most important causes of land degradation in Africa. New attention, therefore, has been focused on the role of trees in agriculture, as well as on the prospects of restoring soil fertility by combining trees and tree products with crops and livestock in integrated farming systems—known as *agroforestry systems*.

Agroforestry is everywhere in Africa. The main types include grazing or farming under savanna trees; growing coffee or cocoa under shade trees; planting fruit trees; sowing tree seeds on fallow land to speed up the restoration of fertility; planting "living" fences, windbreaks, or woodlots; combining trees, shrubs, and field crops in multistoried cropping systems; and growing crops between rows of nitrogen-fixing trees or shrubs ("alley cropping"). In these systems, trees play the role of "nutrient pumps." Because their root systems are deeper than those of nonwoody plants, they bring to the surface nutrients that rains have leached down beyond the reach of other plants. The use of shrubs is also important, as they can yield fuelwood and fodder in less time than trees.

For more detail, see "Agroforestry in Sub-Saharan Africa" by the authors, World Bank Technical Paper No. 112 (1989). Copies available from the World Bank Publications Sales Unit, Washington, DC 20433, USA.

Agroforestry thus appears to hold out hope for reversing the processes of deforestation and soil degradation in Africa. For that reason, the World Bank recently evaluated experiences of farmers with agroforestry (see box) to answer the following questions: (1) Can agroforestry solve Africa's environmental crisis? (2) Why do farmers plant trees? (3) Which agroforestry systems are most likely to be adopted by farmers? and (4) Who should take responsibility?

Scope of the study

The study looked at experiences with agroforestry in East and West Africa, including indigenous and innovative systems in three ecological zones: the humid lowlands, the semiarid lowlands, and the cool highlands. Seven cases in five countries (Kenya, Niger, Nigeria, Rwanda, and Tanzania) were selected for field research, representing a wide variety of agroforestry systems. In each case, researchers sought to understand how farmers perceived the proposed agroforestry system, how it fit into their normal production patterns, what demands it placed on their domestic resources, and what returns it could be expected to provide from the viewpoint of the farm household.

The study team identified some fundamental constraints that should be kept in mind when designing forestry projects:

- The "farm household" is not a single production unit; rather, household members (and in some cases, extended family groups) have different degrees of access to and control over resources, as well as different requirements for return on investments;
- Tree products play multiple roles in the domestic economy: as a source of food, fuel, building materials, craft materials, and specialty products for sale—such as medicinal leaves, bark, and roots;
- Individual rights to plant trees, collect tree products, and fell trees are often determined by customary laws and traditions, which may conflict with rights conferred under a formal legal system; and
- Trees, shrubs, and crop residues are part of a complex system of land management that sustains the separate but interdependent activities of agriculturists and pastoralists.

Answers to key questions

Agroforestry alone cannot solve the environmental crisis, but it can contribute to the solution. It can help to restore vegetative cover in areas where the natural forest has been almost entirely destroyed. However, it is unlikely to be widely adopted for fuelwood production, as long as wood can be collected from public lands at little or no cost. Thus other solutions must be actively sought to meet domestic energy needs.

Farmers plant trees for tangible benefits. Agroforestry has already been widely used by farmers for purposes other than fuelwood production, such as fruit, shade, poles, shelter, and restoration of soil fertility. Local markets for tree and shrub products are important, as these can provide a supplementary source of cash for producers. Agroforestry techniques are most likely to be implemented where farmers perceive that benefits will accrue within a short time frame, or where there are significant opportunities for off-farm income.

Farmers are most likely to adopt those systems that are congruent with local culture. Improving the use of indigenous trees is preferable to introducing exotic species, multipurpose trees are more acceptable than single-purpose trees, and fast-growing trees are more likely to be adopted than slow-growing trees. In areas of low population density, farmers appear more willing to adopt programs of passive protection for useful trees than to engage in active afforestation programs. In higher density areas, however, farmers are willing to invest substantial amounts of labor in order to gain the productivity-enhancing benefits of agroforestry systems.

Agroforestry extension should be integrated into the programs of national agricultural extension services. However, these programs should also be supported by forestry experts, who have technical knowledge of tree species, and by local nongovernmental organizations, which can help ensure project sustainability. ■

Prospects for the Automotive Industry in LDCs

In a technologically changing and highly competitive environment, there may be some investment opportunities, particularly in component and commercial vehicle production

Ioannis Karmokolias

Spurred by rising demand for automobiles and other vehicles, particularly in the developing world, the global automotive industry has grown rapidly in recent years. It represents a significant proportion of global economic activities, with extensive links to many diverse industries and sectors. In 1988, world production of all vehicles was about 49 million, up 4.5 percent over the previous year, and some 20 percent higher than in 1983. Most production still takes place in the developed countries, mainly in members of the Organization for Economic Co-operation and Development (OECD). But developing country production has been growing rapidly, and, if current trends hold, demand for vehicles in these countries will grow the fastest in the next decade.

This may create greater opportunities for investment in this industry in the developing world. But where and what type of investment? There is no simple answer. The automotive industry is a complex one. It is undergoing a massive technological transformation and, as a direct result of shifting patterns in global trade and manufacturing, the industry has become globalized. In other words, a growing portion of a company's production is outside its home country, and intercompany cooperation agreements are on the rise. At the same time, there is heightened international competition, in both sales and production of vehicles and their components. A number of LDCs have entered into the production of automobiles in the last decade or so. Most have yet to establish a firm foothold in the marketplace.

Nature of the automotive industry

The automotive industry is extremely diversified; major product categories include passenger cars, buses, trucks, utility vehicles, and two-wheeler and three-wheeler vehicles. The demand, production processes and organization, technological requirements, marketing, and distribution for each of these products vary considerably.

The automotive industry in the developing world is different from that of the developed world. LDC production volumes are typically small, and key operations such as research and design are virtually nonexistent. In almost all cases, the LDC manufacturer is linked with a foreign firm as either a subsidiary or a joint venture, or through a licensing arrangement.

Over the past few decades, the growth of the automotive sector in LDCs has been driven mainly by government policies that feature high levels of protection and high local content requirements. While these policies have stimulated local manufacture of vehicles and components, they have at times enabled some local industries to survive even though they are inefficient. In a few LDCs, however, automotive production has reached a level of efficiency that allows LDC products to compete successfully in international markets.

Structure of the LDC market

Of the 48 million vehicles produced worldwide in 1988, about 10 percent were produced in developing economies (excluding Eastern Europe). Six of them—Brazil, China, India, Republic of Korea, Mexico, and Taiwan Province of China—account for 70 percent of total production of automobiles in such economies. In all, about 30 LDCs manufacture or assemble vehicles, and at least 60 produce parts and components.

Although product mix varies significantly among LDCs, in general they produce a larger proportion of commercial vehicles (39 percent in 1988) compared with the OECD countries (27 percent). Investment costs can be amortized more rapidly through mass production of passenger cars than through low-volume production of commercial vehicles, yet production of the latter is often more suitable for LDCs for the following reasons: the labor content per commercial vehicle is higher since production volumes are lower for commercial vehicles than for cars, and design changes for commercial vehicles occur less frequently than for cars, making the costs of design, retooling, and, more generally, of the introduction of new models lower. Finally, the high cost of transporting heavy-truck and bus bodies from overseas suppliers also favors at least partial local assembly or manufacturing.

A rough estimate of the value of LDC vehicle production in 1988 is $90 billion, including $45 billion in Eastern Europe. Estimates of component sales are not available. LDC automotive exports amounted to about $8 billion in 1987, of which about $5.5 billion reflected sales of vehicles—mostly subcompact passenger cars and light commercial vehicles—while the rest was sales of components. LDC vehicle exports are highly concentrated in terms of both origin and destination. Only three countries—Korea, Brazil, and Mexico—have managed to export sizable volumes, with export sales in 1987 of $3 billion, $1.5 billion, and $1.5 billion, respectively, mostly to the United States. These three accounted for over 90 percent of all LDC vehicle exports. The lack of diversification into several markets is dangerous because if the US market contracts, as is now the case, it would be difficult for these exporters to develop alternative marketing systems in the short run.

The demand prospects for the industry are encouraging. Demand for cars to the year 2000 is expected by industry analysts to increase by an average of 1–2 percent per year in the OECD countries, 7 percent per year in Eastern Europe, and 8 percent in LDCs. Although the current slowdown in demand in the United States may be replicated in other markets during the next two to three years, the long-term growth in demand, together with significant current

developments in the industry, present some opportunities for profitable investments in LDCs.

Automobile manufacturing

Automobile manufacturing requires significant financial, technical, managerial, and organizational resources and expertise. It also needs large production and sales volume if profits are to be achieved within the technological life of a particular design. Only a relatively small number of LDCs have the necessary conditions (e.g., access to a large market, adequate managerial, engineering, and labor skills, and cross-border movement free of logistical and regulatory constraints) to support an economically viable automobile manufacturing industry (see Table 1).

The initial investment required for setting up a car manufacturing facility is substantial. It can range from $1.5 billion for development, engineering, and tooling for a new passenger car in Europe to $150 million for a 35,000 cars-per-year assembly plant in China. The high initial investment cost and the need for frequent additional investments to remain competitive, make large-scale production and sales essential.

A volume of 250,000 cars per year has traditionally been regarded as the minimum economic size of a car manufacturing plant. Recently, some of the major automobile manufacturers have developed management, design, and production processes that can be profitable at lower volumes. Already there are a few examples of highly efficient Japanese plants operating profitably at volumes of about 150,000 cars per year. This development may increase opportunities for investments in some LDCs that are now constrained by the small market size.

Changes in technology

The industry is seeing major changes in process and product technology, and these changes have important implications for the competitiveness of LDC manufacturing and assembly operations. One of the most significant areas of technological development is new materials. There is an increasing shift from iron and steel to aluminum, and from special steel and die-cast zinc to plastics and composites. The second main change is in product technology, with a substantial increase in the application of electronics.

Robotization and computer-aided design and production are now widely adopted by manufacturers of automobiles and components in the industrialized and the more advanced developing countries. These technologies enable manufacturers to improve quality and respond to consumer preferences by producing different models on the same assembly line and, through less retooling, rapidly shifting to new models with shorter production cycles. Design is particularly important because about 70 percent of the eventual total cost of a passenger car is determined by the decisions made during this stage.

Table 1
Vehicle production in developing economies, 1987[1]

	All vehicles (In thousands)	Passenger cars (In percent)
Latin America		
Argentina	193	82
Brazil	920	74
Chile	7	37
Colombia	52	79
Mexico	233	61
Peru	13	36
Venezuela	115	64
Asia		
China	455	4
India	286	52
Indonesia	163	21
Thailand	102	28
Pakistan	33	49
Turkey	139	46
Rep. of Korea	980	81
Malaysia	49	69
Philippines	8	73
Taiwan Province of China	251	77
Africa		
Egypt	24	82
Kenya	11	17
Morocco	17	73
Nigeria	43	72
Europe		
Portugal	124	68

Source: Automobile International, *World Automotive Market*, 1988. Numbers have been rounded up.
[1]Excludes Eastern Europe and the Republic of South Africa.

The implication of these technological developments for LDCs is that the labor content in the cost of car production is decreasing and the production process emphasizing quality and flexibility requires experience and expertise not easily available in an LDC. In a few cases, LDCs can adopt labor intensive technologies that do not unduly compromise product quality and efficiency. These are more likely to be found in the production of commercial vehicles and some components for which labor content is higher than for cars. However, as the gap between modern automotive technology and LDC technological capabilities widens, some LDC vehicle producers will find themselves at an increasing disadvantage. This may be offset through collaboration between domestic and international manufacturers, but in countries with a poor manufacturing and engineering base, the scope for efficiency gains will be limited. Collaboration has been very common to date, mostly in the form of joint ventures and licensing agreements, and these arrangements will become even more important in the future.

Production processes

In addition to technology, organization of the production process is changing rapidly, particularly in the area of component procurement characterized by the Just-In-Time (JIT) inventory concept. JIT aims to improve the efficiency in the flow of materials, reduce storage costs, and increase production flexibility. A related trend is the decrease in in-house manufacturing, particularly in OECD countries. LDCs could benefit from this trend by specializing in component production, provided they maintain high quality and reliable delivery. A few economies (e.g., Korea or Taiwan Province of China) with the necessary level of technical and organizational capability and a developed infrastructure (transport and communications) to adopt JIT would be able to achieve lower production costs and attract foreign investment.

Although plants of a somewhat smaller economic size may become more common in the future, car manufacturing will remain a high-volume operation during the next decade. Accordingly, car manufacturing will continue to require a large market, of which the home market will need to be a major portion, as has been demonstrated by the experience of all major manufacturers. LDC production primarily for export is not an economically viable proposition since labor costs, about 15 percent of the total car manufacturing cost, are not by themselves a sufficient reason to locate in an LDC.

Component manufacturing

In developing countries, there appear to be more opportunities in component than car manufacturing. The value of components produced worldwide in 1988 as original equipment has been estimated at $350 to $400 billion with perhaps an equal amount for replacement parts. The global value of component trade in 1987 amounted to about $60 billion, of which an estimated $3.4 billion originated in LDCs (see Table 2).

Growth of the components industry depends primarily on opportunities for subcontracting, both in the LDC itself and internationally. Reliance on external suppliers has increased substantially because of the need for greater flexibility and the emphasis on lowering costs. In Japan, only an estimated 30 percent of a car is produced in-house (40–45 percent in the United States and Europe). Suppliers in developed countries

Table 2
Automotive component exports from developing economies, 1980–87
(in millions of US dollars)

	1980	1985	1987
Argentina	63.3	62.9	67.2
Brazil	—	424.6	1,500.0[1]
Colombia	20.6	6.0	—
Hong Kong	0.8	1.8	2.2
India	72.1	48.7	—
Rep. of Korea	20.5	93.0	181.0
Malaysia	2.7	3.7	5.7
Mexico	—	499.0	1,000.0[1]
Morocco	7.4	10.0	15.9
Philippines	30.3	20.9	—
Portugal	6.6	66.0	130.4
Singapore	82.6	78.5	98.4
Taiwan Province of China	94.7	345.6	618.3
Thailand	9.3	11.4	21.3
Tunisia	0.3	4.4	19.1
Turkey	43.9	65.5	71.6

Source: United Nations Trade Data, 1989.
Note: Excludes Eastern Europe.
—Indicates data not available.
[1]Unofficial estimates.

may not be able to reduce costs continuously because of high labor and overhead costs. Hence, the need to reduce costs, often exacerbated by appreciating currencies and wage increases, will lead major car manufacturers toward component manufacturing in LDCs, provided that strict quality and delivery standards can be met.

Different types of LDCs attract different types of component production. JIT and greater involvement by the supplier in research and design engineering means that sophisticated, capital-intensive components (such as engine parts, gear boxes, or special metal parts) are likely to be produced for the local or export market in technologically advanced economies with a developed automotive industry (e.g., Brazil, India, and Korea) or those that are near major manufacturing countries (e.g., Mexico, Portugal, Turkey, and Taiwan Province of China). Production of labor-intensive, simple technology components such as wire harnesses, upholstery, interior trim, batteries, exhaust systems, and odometers will be feasible in less technologically advanced LDCs (e.g., Algeria, Malaysia, Morocco, and the Philippines). In almost all cases, association with a major company, under a joint venture or licensing arrangement, to provide technical support will be necessary. With the JIT system, the supply to original equipment manufacturers will have to be extremely reliable, which will rule out politically unstable developing countries, or those with undeveloped communications and transport networks.

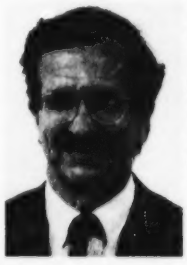
The importance of real exchange rate movements in the location of component manufacturing facilities is illustrated by the influx of Japanese investment in Southeast Asia since the rise in the yen. Japanese automotive manufacturers expect to continue investing there at least during the next two or three years with Taiwan Province of China, Indonesia, Malaysia, the Philippines, and China high on the list of candidates for Japanese investment. Thailand will continue to attract investment, but rising labor costs and infrastructure bottlenecks are causing a more cautious approach among potential investors. Brazil provides another example. Its component exports increased from $1.5 billion in 1987 to a reported $2.4 billion in 1989, even though vehicle exports during the same period decreased substantially. However, in late 1989 and early 1990, several component and vehicle assemblers in developed markets discontinued imports from Brazil in favor of other countries, because of the overvalued Brazilian currency.

In all cases, with possible exceptions in simple spare part manufacturing, local investors would need to associate with established component manufacturers to ensure quality control availability of technology, and access to the market. It would be extremely difficult for a newcomer to penetrate the market, especially with the very stringent quality standards required and the traditionally close ties between car manufacturers and their suppliers.

Policy developments are likely to be important for the future growth of the components industry in LDCs. One possibility is that traditional import substitution policies may give way, in part, to regional trade agreements among LDCs. Progress to date on this front has been limited. The ASEAN (Association of Southeast Asian Nations) complementarity program, specifically established to facilitate trade of automotive components among member countries, has been constrained by the protectionist barriers that each country maintained. Some private companies, however, are playing a role in promoting trade. Mitsubishi and Toyota, for example, within the limitations of regional trade policies, have been particularly active in Southeast Asia in producing auto components in different countries and supplying their assembly or servicing operations in the region from these sources. More successful examples are the Auto-Latina project jointly undertaken by Ford and Volkswagen, under which automotive products are exchanged between the two companies from facilities located in Argentina, Brazil, and Venezuela; and the Scania facilities in Argentina and Brazil, which also exchange portions of their respective outputs.

Overview

During the next decade, keener competition among major producers and the efforts to reduce costs will present opportunities for developing countries mainly in component manufacturing. However, the ever-increasing sophistication of management, production, and delivery systems will require manufacturers in developing countries to maintain high-quality and reliable delivery if they are to be competitive in the international market. Production of commercial vehicles may also be suitable for some developing countries because labor-intensive production processes would give them a comparative advantage in servicing their respective local and regional markets over distant OECD production sites. ■



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BOOKS

Jacob J. Kaplan and Gunther Schleiminger

The European Payments Union

Financial Diplomacy in the 1950s

Oxford University Press, New York, NY, USA, 1989, vii + 396 pp., $72.

The European Payments Union (EPU) was a financial arrangement among the 18 members of the Organization for European Economic Cooperation (the forerunner of the OECD) that lasted from 1950 until 1958. Yet its history is well worth reading more than three decades later. That history deals with subjects of perennial concern to the IMF and the World Bank: finding the correct mixture of adjustment and financing for countries in serious balance of payments disequilibrium and promoting policy cooperation among countries through mutual and international pressure. The two authors were active participants in the second half of the life of the institution, Kaplan as the US observer on the EPU Managing Board, and Schleiminger as its German alternate member.

In the early postwar years, trade in Europe was conducted under a grid of bilateral payments arrangements with limited credit margins, which were nearing exhaustion by 1947. Shortage of foreign exchange induced bilateral debtors to cut back on imports, thus blocking the growth of intra-European trade, which was essential for the economic recovery of the continent. It took the Europeans and ECA (the Economic Cooperation Administration, the US agency that administered the Marshall Plan) three years to design and agree on a mechanism that could break through this impasse.

The main features of the scheme were: a sharp reduction of quantitative restrictions on European trade, without the United States insisting on simultaneous liberalization for dollar imports; monthly multilateral settlement of European surpluses and deficits, under formulas that allowed for partial settlement in credit up to an agreed quota for each country, and fully in dollars beyond the quota; and a crucial capital contribution of dollars by the ECA to cover differences between the dollar payments that the EPU might receive and pay out.

The OEEC established an eight-member Governing Board to keep an eye on the functioning of the EPU mechanism, which many hoped would be largely automatic and for which the Bank for International Settlements acted as the financial agent. Almost at once, however, the Board found itself drawn into actions to keep the institution alive, as one crisis after another (starting with a large German deficit) pushed countries to the limits of their quotas or beyond.

By force of necessity, the Governing Board assumed many of the functions exercised by the Executive Directors of the IMF, and some exercised by the Fund staff. It held hearings to listen to member country delegations, passed judgments on members' policies, and backed them up with special credits or enlarged quotas. It also took the lead in the annual negotiations for the renewal of the EPU that often involved changes in the mechanism; and its discussions prepared the ground for the acceptance of de facto convertibility by most EPU members at the end of 1958. Because the EPU constituted a closed settlement mechanism with total monthly deficits equaling total monthly surpluses, the Board was under equal pressure to find solutions for unusually large surpluses and deficits—a notable difference from the IMF. Like the Fund, the EPU often struggled with members unwilling to make timely adjustment or adopting retrogressive adjustment policies that only worsened the problems some months later. The authors describe at considerable length the episodes of the "Perils of Pauline" through which the EPU went while members pursued often inadequate solutions for successive (or simultaneous) debtor and creditor crises.

Before its creation, and in its early years, the EPU was sharply opposed by the US Treasury and the IMF, who feared that the partial financing of balances with credit would perpetuate a discriminatory soft-currency area and would lead to an indefinite postponement of convertibility. Against this, protagonists of EPU, in ECA and in Europe, stressed the immediate benefit of breaking through the stifling bilateralism of the late 1940s to large-scale liberalization, at least within Europe. They also expected that the limits on credit and the possibilities of "hardening" the settlements over time would gradually steer the system toward full dollar settlement, convertibility, and worldwide nondiscrimination.

The latter view proved to be the correct one. Settlement in credit turned out to be important in the first two years of EPU only. Over the next six and a half years, as quotas became exhausted, credits taken earlier needed to be repaid and settlement ratios were "hardened," the credit component in settlement fell on average well below 10 percent. The ultimate success in the achievement of convertibility, on the basis of which the EPU was able to engineer its own liquidation, justifies the warm sentiments for the institution that old timers continue to feel and that the authors make no attempt to hide.

J.J. Polak

Barry Eichengreen and Peter H. Lindert (editors)

The International Debt Crisis in Historical Perspective

MIT Press, Cambridge, MA, USA, 1989, 282 pp., $25.

Robert Devlin

Debt and Crisis in Latin America

The Supply Side of the Story

Princeton University Press, Princeton, NJ, USA, 1989, xvi + 320 pp., $35.

The emergence in the early 1980s of widespread debt-servicing problems has prompted a multitude of studies seeking to analyze the nature and implications of debt creating flows. The two volumes reviewed here attempt to push the discussion forward through analysis of historical precedents and of factors determining the supply of commercial credit.

The volume edited by Eichengreen and Lindert brings together seven historical studies summarized nicely in the overview chapter. The focus is primarily on the nature of private sector international lending and on the mechanisms for restoring normal creditor-debtor relations, with a view to drawing implications for the current debt situation.

The post-1973 lending boom differed from earlier episodes in the predominance

of commercial bank credit as opposed to bond financing. The studies show that the change in the nature of financing affected the response of the official sector in creditor countries. While in earlier periods creditor governments tended to play a relatively passive role—with some notable exceptions—threats to the integrity of the banking system in the 1980s contributed to a more centralized and concerted debt settlement process.

Can lessons be drawn from past experiences for the resolution of the current debt problems? The studies suggest that the chances are good for a return by debtor countries to spontaneous market access. The private sector has repeatedly been willing to resume large-scale lending to sovereign borrowers, reflecting the relatively high overall profits on such loans—though less than implied by the initial contractual terms.

The outlook for rapid restoration of market access for the bulk of developing countries with recent debt problems is clouded upon closer investigation of the evidence presented in the studies. Unlike previous debt crises, losses have been borne by a relatively small group of creditors—commercial banks. Other forms of credit, such as bonds, may still be available but are unlikely to compensate fully for the reduction in commercial bank credit facilities. Moreover, increased differentiation among borrowers by creditors suggests that general factors will be subordinated to individual country considerations—thereby emphasizing the need for debtors to restore creditworthiness through the sustained implementation of strong adjustment policies. In any case, the prospect of an eventual return to market access provides little comfort to countries facing severe short-term credit rationing.

Robert Devlin's book focuses primarily on the supply side of the debt crisis, arguing that banks were a source of instability. Using an oligopolistic market approach and drawing upon empirical data on credit conditions in Latin America, Devlin supports the view that banks engaged in an initial overexpansion of lending, followed by an overcontraction. The resulting disruption for developing countries was accentuated by domestic policy slippages, reflected in an inability to generate sufficient return on debt-financed activities.

Devlin argues that, in seeking to protect the financial integrity of the banking system, the initial management of the debt crisis imposed a disproportionately high cost on debtors. In the context of the recent strengthening of banks' balance sheets and the associated weakening of banks' cartel-like behavior, debtor countries are urged to take a more active stance in the management of the debt strategy, including through unilateral limitation of debt service.

Although comprehensive in its analysis of the emergence and gravity of the debt crisis, Devlin's study is weaker in its discussion of policy responses. The central policy challenge concerns how to support countries' adjustment efforts with sufficient financing—including debt relief—while maintaining a cooperative framework conducive to safeguarding access to short-term credit facilities and facilitating an eventual return to normal market access. Devlin's book fails to demonstrate convincingly that the benefits of an openly confrontational approach would not be quickly offset by the potential reduction in access to financing instruments essential for the day-to-day management of trade and other external transactions.

Mohamed El-Erian

Robert Stern (editor)

Trade and Investment Relations among the United States, Canada, and Japan

The University of Chicago Press, Chicago, IL, USA, 1990, viii + 448 pp., $55.

A collection of papers and discussants' comments that were prepared for a conference held in April 1987, this book provides useful background information on the linkages among the three major Pacific Rim countries in the title. It is based on a detailed statistical analysis of trade patterns, tariff and nontariff barriers, and foreign investment. Although the subject matter is interesting, both from the viewpoint of the three countries and from a global perspective, the discussion is a bit dated as significant events like the ratification of the Canada-US Free Trade Agreement and negotiations between officials of the United States and Japan took place after the conference was held.

The emphasis of the book is more on structural features of the three economies than on macroeconomic issues. For example, there is a good analysis of the impact of informal barriers on imports and the tax incentives (disincentives) on saving in these countries. The integration of trade questions with aggregate demand and supply factors, however, is incomplete. No clear consensus emerges concerning the factors behind US current account deficits and Japanese surpluses: Is it the US fiscal position, or Japanese trade barriers and incentives for private saving? The book gives more attention to the second hypothesis, but on balance, rules against a simple protectionist explanation.

The book is divided into four parts. An overview section contains a good survey of recent macroeconomic developments by John Helliwell, in which he focuses on the saving/investment approach and on the convergence of technology in developed economies. Another paper in this section, by Yoko Sazanami, gives detailed information on trade and investment relations among the three countries. The second section, entitled "International Trade and Structural Adjustment," contains an analysis of trade in primary products (by Andrew Shmitz), industrial policies (by Robert Z. Lawrence), tax effects on trade and investment (by John Whalley), and some speculation on how the Asia-Pacific region may evolve (by Saburo Okita).

The third section is likely to be the most interesting for many readers as it considers the question of market access from a much broader perspective than that of tariff levels and quotas or voluntary export restraints. A conceptual paper by Richard Harris argues that cultural barriers and barriers to entry of foreign firms also constitute restrictions on market access. Gary Saxonhouse and Robert Stern attempt a detailed analysis of formal and informal barriers to trade and investment in the three countries, concluding that "there is not much evidence to support the contention that Japan relies on a variety of informal barriers for the purpose of influencing the structure of its trade." The final section emphasizes the macroeconomic issues. Dale Henderson and William Alexander contrast the effects on exchange rate volatility of currency and bond market substitution, while Warwick McKibbin, Nouriel Roubini, and Jeffrey Sachs argue that divergent fiscal policies do a good job in explaining US and Japanese current account and exchange rate developments in the 1980s.

Paul Masson

Jagdish Bhagwati and John Douglas Wilson (editors)

Income Taxation and International Mobility

The MIT Press, Cambridge, MA, USA, 1989, ix + 221 pp., $32.50.

Quite a while ago, Professor Jagdish Bhagwati, one of the better-known examples of international brain-drain, started arguing that LDCs should be compensated in some form for what they lost by "brain-drain." He organized a meeting of experts in New Delhi in 1981, supported by The Ford Foundation. This resulted in a number of interesting papers, which, together with some other contributions, make up a book, published, however, with regrettable delay. In addition to the editors, contributors include William J. Baumol, Koichi Hamada, Gary Clyde Hufbauer, James A. Mirrlees, and Richard Pomp.

Unfortunately, there is a fundamental problem with this book. The authors rightly describe the brain-drain as one in which the LDCs train people, who later use their potential to feed the tax-rolls of other, normally richer, countries. If these people could be forced to pay income tax in their home countries—although with a deduction or credit for the tax paid in their countries of employment—the authors argue that this would have a beneficial influence on the home countries' tax base. What is more, it would widen the scope for income taxation, now unduly narrowed by the real or perceived risk of provoking a brain-drain. But the only practical instances of taxation based on citizenship that are cited serve to illuminate the unworkability of such a system. The US system functions incompletely; the Philippine system according to the authors is a total failure.

The book thus remains a theoretical exercise, dwelling on the possible outcome of a system that so far has proven to be unrealistic. For it to work, there would have to be extraterritorial exercise of tax authority; the United States has some practices that might be (malevolently) described that way, but no other country would even dare to try such a thing, let alone have the resources to do so. Alternatively, host countries could cooperate voluntarily. But here, again, there are sovereign considerations. Moreover, not all developing countries are under a regime fulfilling such standards as to make it palatable for host governments to collect taxes on their behalf, or acceptable to their expatriates to have to support them.

The book also suffers from a terminological flaw. The editors believe that global income taxation means taxation of citizens on their worldwide income, whereas all other income taxes are schedular. An expert reviewer could have told them that (1) schedular taxes are those imposed separately on different elements of a person's income without using the total net income as a tax base; (2) "global" income taxation is sometimes used as the opposite of schedular income taxation to characterize a tax on total net income (better described as "synthetic"); (3) "worldwide" income taxation is often used in the sense of taxing all income derived by a resident taxpayer (or citizen) regardless of source; and (4) taxation according to citizenship seems to be the only acknowledged term for the odd system applied by the United States and the Philippines.

The book is an example of the best being the enemy of the good. The authors now discuss in terms of optimal taxation what would be the situation if a "citizens' tax" worked, a situation rather far from reality. They could have made the book more useful, if, instead, they had tried to present a workable alternative.

Leif Mutén

Richard Baillie and Patrick McMahon

The Foreign Exchange Market

Theory and Econometric Evidence

Cambridge University Press, New York, NY, USA, 1989, xii + 259 pp., $44.50.

Since the breakdown of the Bretton Woods system, the foreign exchange market has held an irresistible appeal for many applied economists and econometricians. Simple monetary models of exchange rate determination have been tested and, given their frequent failure to explain the data, have been refined to incorporate exchange-rate expectations, wealth effects, imperfect asset substitutability, and sticky prices. A battery of econometric techniques has also been aimed at testing whether foreign exchange markets are efficient, in the sense that exchange rates embody all available information and that no riskless profits can be earned through arbitrage.

Baillie and McMahon survey the progress of research on the behavior of floating exchange rates. In the early chapters, they first discuss the principles and implications of market efficiency, and then go on to present the theoretical models that have had the greatest role in empirical research, namely the monetary and portfolio balance models and their variants. The models they present treat exchange-rate determination and market efficiency as largely separate topics, in contrast to some recent models, associated with Lucas and others, that integrate money and finance in a framework of individual intertemporal optimization.

In the later chapters of the book, the authors survey a range of empirical techniques and results, with particular emphasis on their own recent work; the exposition is aimed at readers with more than passing familiarity with, and interest in, econometric method. The authors review various tests of market efficiency, covered and uncovered interest arbitrage, the usefulness of forward exchange rates as predictors of future spot rates, and the way in which "news" is incorporated into exchange rates. Finally, they describe some efforts to identify and test simple models of exchange rate determination. They also give considerable emphasis to applications of time-series analysis.

Some disquieting results emerge from tests both of market efficiency and of models of exchange rate determination. There is a substantial body of evidence against foreign exchange market efficiency, in several of its aspects; although this does not preclude the possibility that the assumption of efficiency is still a good enough approximation for many purposes, it still implies that this assumption cannot be invoked without caution. There has also been a general failure to find a model of exchange rate determination that performs well for a range of sample countries and periods.

The negative character of many of the empirical results surveyed by the authors may be seen as challenging the view that the exchange rate is best left to be determined by market forces, by suggesting that, in the foreign exchange market, these market forces are still not well understood. It also challenges researchers to refine their models further, in search of a better reconciliation of theory with econometric evidence.

Timothy Lane

Dwight S. Brother and Adele E. Wick (editors)

Mexico's Search for a New Development Strategy

Westview Press, Boulder, CO, USA, 1990, 378 pp., $39.95.

Since the oil price shock of the early 1980s, there has been a significant restructuring of the Mexican economy, which is, in many ways, unique. The fiscal turnaround, trade liberalization, and privatization reforms have often gone further than Mexico's external financiers and advisors could have hoped for. The papers in this edited volume, presented at a conference at Yale University, have been written by academics and policymakers in Mexico. The authors describe clearly and concisely the weakness of the previous development strategy, point out the move toward a new strategy, and analyze its political economy ramifications. Mexico's debt problem is discussed in detail, highlighting the role of the debt overhang in retarding economic growth. The papers nicely lead up to the recently negotiated debt settlement between Mexico and its creditors. The analyses lend credibility to the optimistic view that robust growth will be the outcome of this long and painful process, and that the living standards of the poor and the middle class in Mexico, who have suffered for so long and with such patience, will improve.

Robert Goodland (editor)

Race to Save the Tropics

Ecology & Economics for a Sustainable Future

Inland Press, Washington, DC, USA, 1990, xvi + 219 pp., $45 (hardback); $24.95 (paper).

This book, the first on applied tropical ecology, examines the many, often brave attempts to apply basic ecological principles to the pressing development issues of tropical countries. The issues discussed include agricultural development, agroforestry, tropical forest management, pest management, the planning of large-scale hydropower and irrigation schemes, and the challenge of integrating applied ecology with national conservation plans. An introductory chapter reviews the various impacts of economic development on the natural environment and maintains that applied ecology is critical to helping sustain the natural resources upon which societies depend. The authors contend that many of the tools for sustainable development are in place: national conservation strategies, the traditional wisdom of the small farmer and ancient cultures, and geographical information systems. Readers, however, will find the book particularly useful in demonstrating the integration of conservation with development and ecology with economics—the next intellectual step in the environment saga.

Jeffrey D. Sachs and Susan M. Collins (editors)

Developing Country Debt and Economic Performance

Country Studies—Indonesia, Korea, Philippines, Turkey, Vol. 3

University of Chicago Press, Chicago, IL, USA, 1990, x + 621 pp., $75.

This book is part of a larger NBER project on international debt completed in 1987; it presents case studies on eight highly indebted countries. The four countries included in the volume are the ones that have had the most successful economic experience, with the possible exception of the Philippines, which has not quite lived up to expectations. The studies provide not only a comprehensive economic history of the last 20 or 30 years, but also an insightful analysis of policy decisions, and of the lessons to be derived from them. The only exception, coincidentally, is the study on the Philippines, where the authors devote most of their efforts to discuss the relative merits of individual policymakers under the Aquino Government, or describe the fortunes of certain individual entrepreneurs under the Marcos regime.

Robert LaPorte Jr. and Mumtazar Bashir Ahmed

Public Enterprises in Pakistan

The Hidden Crisis in Economic Development

Westview Press, Boulder, CO, USA, 1989, xix + 219 pp., $24.95.

Given the increasing emphasis, by multilateral lenders and by LDC governments themselves, on improving the performance of parastatals in the developing world, this study should provide useful guidance for policymakers. It offers not only an economic and financial analysis of the public sector and individual parastatals, but also an explanation of the administrative links between them and the government that affect decisionmaking. These relationships are by no means unique to Pakistan, making this book interesting for readers in other developing countries seeking either to privatize or to improve the efficiency of their public sectors.

Philippe Le Prestre

The World Bank and the Environmental Challenge

Susquehana University Press, Cranbury, NJ, USA, 1989, 283 pp., $36.50.

In recent years, environmental degradation and its effects on economic development has become a matter of utmost importance for nations throughout the world. This has led to the search for a "leader," a role that, for many, seemed uniquely suited to the World Bank. This book provides an overview of the Bank's evolving environmental policy, focusing on the institution's internal and external constraints, the controversy that has surrounded its environmental record in the 1980s, and the prospects for change following the major 1987 reorganization. It offers a useful insight into the dynamics of the Bank's interactions with member nations, nongovernmental organizations, and other multilateral agencies. The author concludes that the Bank will have to play a crucial role in the years ahead as mankind has little time left to adjust to ecological scarcity. Although the 1987 reorganization of the Bank will not eliminate the internal and external constraints on policy, he says it may well increase the Bank's ability to respond efficiently and effectively to the environmental challenge.

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